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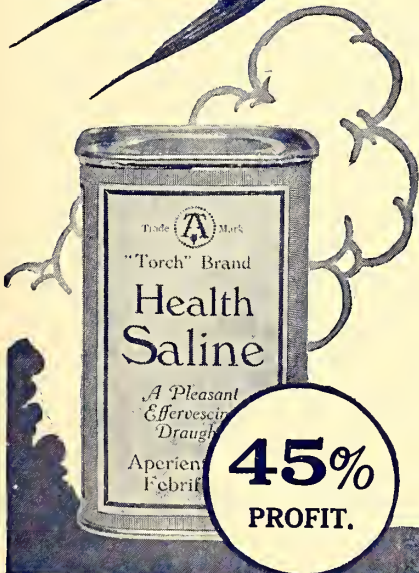
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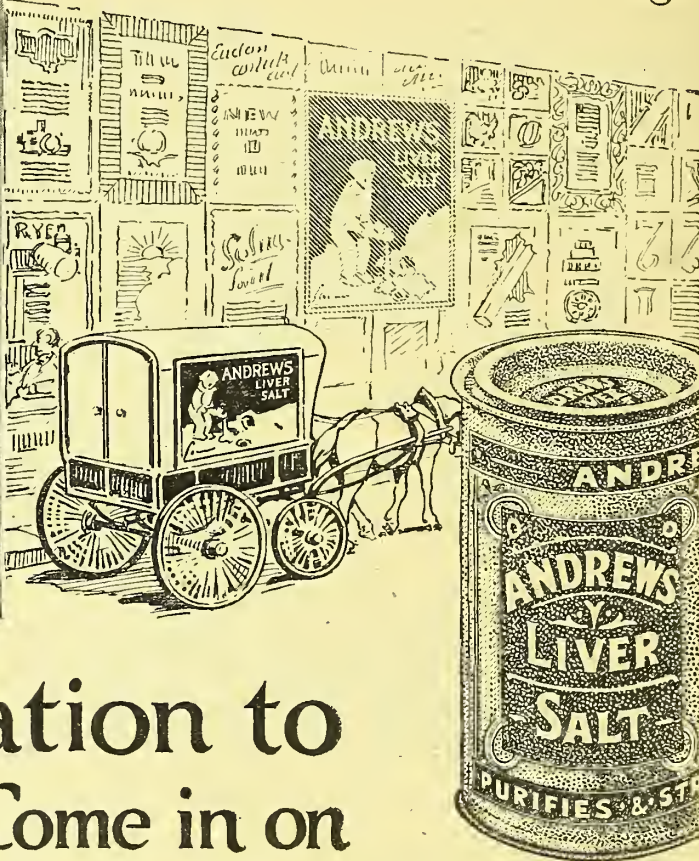
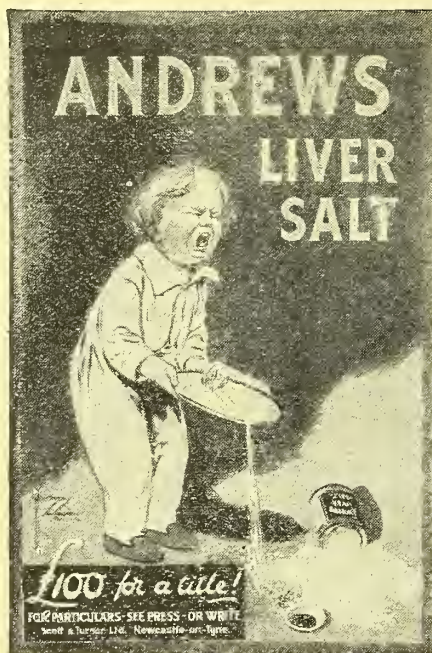
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1 dozen on card,
20/- gross.



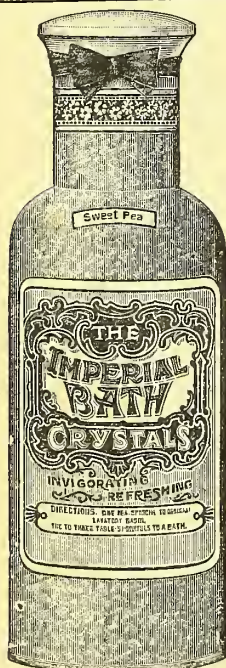
DRY SHAMPOO POWDER. NO WATER REQUIRED.



No. 4554. 1 dozen on card,
18/- gross.

No. 4554/5. 5 packets in carton,
8/6 dozen cartons.

No. 4554/7. 7 packets in carton,
10/6 dozen cartons.



THE IMPERIAL BATH CRYSTALS FOR THE TOILET AND BATH.

Assorted Perfumes—
VIOLETTE, LAVENDER,
SWEET PEA, COLOGNE,
VERBENA and ROSE.

No. 4564.
6 oz. size .. 10/- dozen.
No. 4566.
16 oz. size .. 20/- dozen.
No. 4567.
32 oz. size .. 33/- dozen.
No. 4568.
40 oz. size .. 54/- dozen.
Special line (90 oz.)
Glass Stoppered 9/- each.
4 lb. tins .. 4/6 each.
7 lb. tins .. 7/6 each.

The Latest Seller.

EMULSIFIED COCOANUT OIL SHAMPOO.

— REDUCED PRICES —
QUALITY MAINTAINED.



No. 4801.

No. 4801.
1/3 size, 4 oz. about (with
sprinklers) .. 7/3 dozen
84/- gross.

In bulk .. 9/- gall.
" .. 1/3 lb.
5 gall. lots .. 8/9 gall.

Containers extra.

Name and address free on
6 dozen No. 4801.

R. HOVENDEN & SONS, Ltd., LONDON

29, 30, 31, 32 & 33 BERNERS ST., OXFORD ST., W.1
Tel. . Museum 2810 (3 lines).

And 89, 91, 93 & 95 CITY RD., FINSBURY, E.C.1.
Factory : 41 to 53 BRITANNIA ROW, ISLINGTON, N.1.

Tel. : Clerkenwell 1260 (2 lines).

Maw's



Page

Sell them "Parex"

A SLOGAN of the successful pharmacist is when they ask for Baby Powder, sell them "Parex." It is doing your customer a good turn, and incidentally doing a very good turn to yourself.

From your customer's point of view, "Parex" Baby Powder will give every satisfaction. She will recognise the name from the press advertising which has appeared, and she will like the quality of the powder and the way it is presented.

From your point of view it is a line well worth handling. Because it has been extensively advertised it is easier to sell, because it is nicely presented and adequately supplied with display matter it makes a good show on your counter or in your window—and above all there is the question of your profit. The cost is 6/9 per dozen and the retail price is 1/- per tin, which, allowing for 5% cash discount, is 87% on cost.



"Parex" Baby Powder means good business for you—it is included in the stock of every up-to-date pharmacist, and it satisfies the need of every up-to-date mother.

*When they ask for Baby Powders—sell them "Parex."
It is a successful business proposition. It makes
an effective display. It is a really sound article,
and it brings repeat custom over and over again.*

S. Maw, Son & Sons, Ltd.,
Aldersgate St., London,
and Barnet.

Telephone: City 7
Private Branch Exchange
Telegrams: Eleven Cent London



Cables: Eleven London
Code: A.B.C. 4th & 5th Edition

Great Success of New Liniment

**PHENOMENAL
DEMAND . .**

The FREE SAMPLE OFFER

which forms part of the Advertising Campaign just opened for Bishop's Solidified Rumoleo, is bringing hundreds of applications from all over the country, by every post, for Trial Samples, and remarkably large numbers of orders for the standard size tube (retailing at 3/-) have already been received. Messrs. Alfred Bishop, Ltd., are anxious that the whole of the demand for the standard size Solidified Rumoleo should pass through the hands of their retail friends; every chemist therefore should hold a small stock of this Liniment in order to meet the demand.

BISHOP'S SOLIDIFIED RUMOLEO

*Price to the retail trade
29/6 per dozen (subject).*

ALFRED BISHOP, LTD., 48 SPELMAN STREET, LONDON, E 1.



A campaign is about to be launched in the general Press to acquaint the public with the following outstanding merits of BIDOR:

- (1) It does not give merely temporary relief, but is *permanent* in its effects, removing the constitutional causes of chronic and nervous headaches (migraine).
- (2) It is absolutely harmless to use.
- (3) It is a preparation actually prescribed by many Harley Street physicians.

Bidor is retailed at 3/- per tube or 36/- per doz., stamped. Unstamped 2/6 or 30/- per doz.

DISCOUNT.

| | | |
|---------------------------|-----|--------------------------------|
| 6 dozen and under 1 gross | ... | Less 25 per cent & 10 per cent |
| 12 " " " 3 " " | ... | " 25 " 12½ " |
| 36 " " " over | ... | " 25 " 15 " |

Full particulars from Sole Distributors:

THE BRITISH HAROLD F. RITCHIE & Co. Ltd.
33 Farringdon Road, London, E.C. 1



**KNOWN ALL OVER THE
WORLD AS THE
STANDARD LIQUID
PLASTER.**

TRADE PRICES.

| Retail Price. | Trade Price. |
|-----------------------------|--------------|
| 10½d. Pocket Size... .. | 8/5 doz. |
| 2/- Medium Size | 19/2 " |
| 3/- Physician's Size | 28/9½ " |

£3 and up Carriage Paid.

Order through your wholesaler or direct

Sole Agent for British Isles and Colonies—

J. E. GARRATT,
96 Southwark Street, London, S.E.1.



MIDGLEY'S SOAP

When our traveller calls ask to see samples that you may judge for yourself the style, finish, and price.

TOILETS

| | | | |
|----------|---|-------|------------|
| No. 180. | Unwrapped, all varieties | - - - | 32/- gross |
| „ 213. | Plain Ovals, name of soap only on tablets | - - - | 32/- „ |

BATH SOAP

| | | | |
|----------|---|-------|------------|
| No. 190. | Beautifully moulded heavy weight ovals | - - - | 64/- gross |
| „ 53. | Bath Rounds, finest quality and finish | - - - | 64/- „ |
| „ 151. | Bath Bars (boxed in $\frac{1}{2}$ dozen) approximate weight 8 oz. | - - - | 8/- doz. |

VISITORS

| | | | |
|----------|--------------------|-------|------------|
| No. 170. | Guest Room Tablets | - - - | 12/- gross |
| „ 143. | Hotel Tablets | - - - | 16/6 „ |

We strongly recommend our Best Pale Yellow or Carbolic "Torula" Household Soaps in 1-lb. bars at 51/- cwt. and in 10-oz. doublets at 41/3 gross.

EVANS

EVANS SONS LESCHER & WEBB, LTD.

LIVERPOOL

New York

LONDON

THE REPUTATION OF OVER HALF A CENTURY

ESTABLISHED 1866.



*Samples &
Illustrated Lists
on application*

Australian Representatives
HUTCHINSON & CO. LTD.
26/30 JAMIESON STREET
SYDNEY.

New Zealand Representatives
NEWSON & CO. LTD.
P.O. BOX 1162,
WELLINGTON.

As manufacturers of the best quality of goods only, we invite your inquiries for Compressed Tablets and Pills, Glycerine Lozenges and Jujubes, Glycerine Suppositories, etc.

PUREST
DRUGS.

BEST
WORKMANSHIP

HIGHEST
FINISH

H & T. KIRBY & CO. LTD.

MANUFACTURING CHEMISTS,
NEWMAN HOUSE, WILLESDEN GREEN, LONDON, ENG.

Telegrams "KIRBY, Limited, Phone, London." Codes: A.B.C. 5th Edition & B. n. l. e. y. s. Telephone: Willesden 1412.

Dr. Allinson's Food Preparations

FOR ALL AGES AND CONDITIONS OF HEALTH AT FIRM AND PROTECTED PRICES.

Food for Babies, Prepared Barley,
N. F. Cocoa, Biscuits, Wholemeal, &c.

See Trade Mark "T. R. Allinson" on all our goods—None Genuine Without.

SPECIAL NOTICE.

We issue a list of WHOLESALE HOUSES who keep above in stock, if for any reason you have difficulty in obtaining supplies, please send postcard direct to us, and a list will be sent to you by return.

NATURAL FOOD COMPANY, Ltd.,
Cambridge Road, Bethnal Green, LONDON, E.

All advertising matter—Booklets, Window Displays,
Showcards, etc., free on application.

N.B.—Our goods are to be sold only at prices stated upon the Price List we issue to the trade, and we are pleased to exchange any article which may be out of condition.

Vinum Xericum

| | | |
|------------|------------|------------|
| BUTTS. | HOGSHEADS. | QR. CASKS. |
| 108 galls. | 54 galls. | 27 galls. |

Grade A. STRENGTH 16.5°—17° Abs. Alc.

Grade B. " 18°—19° Abs. Alc.

James V. Oldham

19 St. Dunstan's Hill, London, E.C.3.

Telephone: Avenue 3013.

REAL SILVER LEAF

As supplied for many years to the leading Houses for Pills, Cachous, &c.

We also supply
GOLD LEAF AND GOLD POWDERS

WHOLESALE ONLY.

E. WINTER & CO., LTD.

Head Office: 64 Cheapside, London, E.C.2. Telephone: Central 955

ALL CHEMISTS
SHOULD STOCK

ABDINE

THE GOLD MEDAL HEALTH DRINK.

Quick Seller. Big Profits. Over 40 years' Reputation.
"Abdine" is the most popular Health Drink, superior to all Mineral Waters. The Original and only genuine Fruit Drink.

Reduced Price List can be had on application.

DUNCAN McGLASHAN, LTD, ABDINE WORKS, WESTFIELD RD., EDINBURGH

PURE ORANGE WINE

A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopoeia.

(Wholesale only.)

Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.

Secure as bolts and bars

CORKS

| | | |
|---|-----------|------|
| N.S., for 6 and 8 oz., cheap for Insurance 'Scripts ... | Per Gross | 8½d. |
| MADRID, for 1 and 2 dr. and ½ oz. vials... .. | 10½d. | |
| MADRID XX, same size as Madrid, but superior quality | 1/- | |
| FARO, for 1, 1½, 2 and 3 oz. bottles | 11d. | |
| FARO XX, same size as Faro, but superior quality ... | 1/3 | |
| BRAGA, long tapering, for 1, 1½, 2 and 3 oz. bottles ... | 1/- | |
| BRAGA XX, same size as Braga, but superior quality | 1/4 | |
| LISBON, for 3, 4, 6 and 8 oz. bottles | 1/- | |
| LISBON XX, same size as Lisbon, but superior quality | 1/4 | |
| CORDOVA, for 6 and 8 oz. bottles | 1/4 | |
| CORDOVA XX, same size as Cordova, but superior quality | 1/8 | |
| CADIZ, for 10, 12 and 16 oz. bottles | 1/4 | |
| CADIZ XX, same size as Cadiz, but superior quality... | 1/9 | |
| SPECIAL, for 6, 8, 10 and 12 oz. bottles... .. | 2/- | |
| LUGO, for 20, 30 and 40 oz. bottles | 2/- | |
| VELVET VIALS, hand cut, for 2, 3 and 4 oz. vials ... | 1/9 | |
| VELVET DISPENSING, hand cut, for 6, 8, 10 oz. bottles | 2/- | |
| GINGER BEERS XX | 1/- | |
| GINGER BEERS XXX | 1/3 | |

¼d. per gross reduction on orders of not less than 12 gross.

½d. " " " " " 24 " "

LEATHERBOARD STOCK BOXES

| Containing :— | No. 1. |
|------------------------|----------------|
| 4-gross MADRID | ¼, ½, 1, 2 oz. |
| 3 " FARO | 2, 3, 4 oz. |
| 3 " BRAGA, long | 2, 3, 4 oz. |
| 3 " LISBON | 6, 8 oz. |
| 2 " CADIZ... .. | 10, 12, 16 oz. |

Complete for 15/6

| Containing :— | No. 2. |
|---------------------|----------------|
| 6-gross FARO | 2, 3, 4 oz. |
| 4 " LISBON | 6, 8 oz. |
| 2 " CADIZ... .. | 10, 12, 16 oz. |

Complete for 12/6

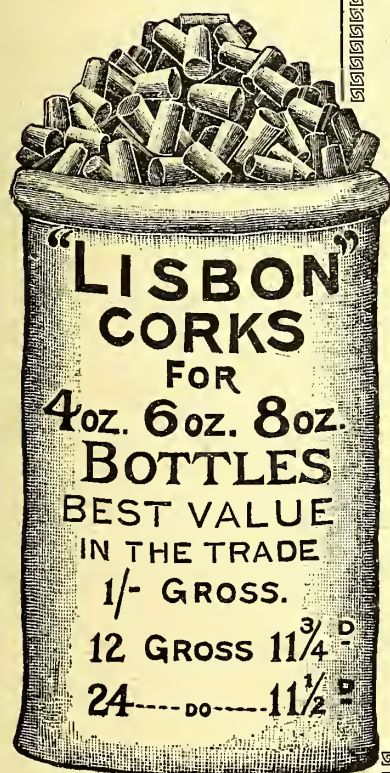
Sample box for ordering purposes containing about 3 gross 3/6

AYRTON, SAUNDERS & Co., LTD.

Manufacturing Chemists

Hanover Street

LIVERPOOL



Doctors know the Vitamin value of

OVIOL

The Cod Liver Oil (52%) and Egg Emulsion

P.A.T.A. Prices :

Retail per bottle, 3/-
Wholesale per dozen, 26/-

OVIOL is obtainable from the following Wholesale Houses :—

| | |
|------------|---|
| Aberdeen | Wm. Davidson, Ltd. |
| Birmingham | Southall Bros. & Barclay, Ltd. |
| Edinburgh | Duncan, Flockhart & Co. |
| Exeter | Evans, Gadd & Co., Ltd. |
| Glasgow | W. R. Hatrick & Co. |
| Hull | Lofthouse & Saltmer, Ltd. |
| Leeds | Hirst, Brook & Hirst, Ltd. |
| Liverpool | Ayrton, Saunders & Co., Ltd. |
| London | Butler & Crispe Edwards, W., & Sons May, Roberts & Co., Ltd. F. Newbery & Sons, Ltd. |
| Manchester | Jas. Woolley, Sons & Co. |
| Plymouth | May, Roberts & Co., Ltd. |
| York | Raines & Co. |

Or direct from the Distributing Agents—

MACLEANS, Ltd. Manufacturing Chemists, 6 Spring St., London, W.2

- I. It is because OVIOL is computed as 125 times as rich as butter in fat soluble Vitamin "A."
 - II. It contains the water soluble Vitamin "B" not present in butter and the usual emulsions.
 - III. Though of higher percentage in oil than any other emulsion, is most readily digested.
 - IV. It contains 52% Norwegian Cod Liver Oil and eggs.
 - V. It has a really pleasant flavour which ensures it being regularly taken.
- That is why Doctors all over the country are prescribing OVIOL.

DO YOU STOCK OVIOL ?

Prizes for You—and Prizes for your Customers—are only two of the advantages to be gained by stocking for your summer trade.

NATURAL

HEALTH SALT.

303 PRIZES for Retailers.

| | |
|--------------------|----------|
| 1st Prize..... | £50 |
| 2nd " | £25 |
| 3rd " | £12 10s. |
| 100 Prizes of..... | 10s. |
| 100 " " | 5s. |
| 100 " " | 2s. 6d |

Write for particulars.

In addition—you must remember that this Health Salt is daily winning new custom. It is recognised and acknowledged to be the **only** Natural Way to Health. Because of this—there is easy selling, and increasing profit for showing it prominently.

Stock up now for your share of the Summer trade. New Showcards, Window Bills, and Handbills supplied.

WILKINSON & SIMPSON, Limited
Manufacturing Chemists, NEWCASTLE-UPON-TYNE

THE WORLD'S BEST

HONEY

(New Zealand)

"IMPERIAL BEE"

The FINEST QUALITY THAT BEES PRODUCE

BUILD your HONEY TRADE on a sure FOUNDATION
QUALITY means REPEAT ORDERS.

| | | | |
|-------|--------------------------|--------------------|---------------|
| Cases | 48×1's .. | Screw-top Glass .. | 12/9 per doz. |
| " | 48× $\frac{1}{2}$'s .. | " .. | 7/6 " |
| " | 48×1's .. | Monopots | 11/3 " |
| " | 48× $\frac{1}{2}$'s .. | " | 6/- " |
| " | 30×1's .. | Glass Tumblers .. | 12/9 " |
| " | 18×1 $\frac{1}{4}$'s .. | Glass Toby Jugs .. | 17/9 " |

CARRIAGE PAID TO ALL PARTS OF U.K.

Special quotations to the Wholesale Trade and large buyers.
Quotations for Bulk (cases of 2/60 lb. tins) of all grades on application.

New Zealand Honey Producers' Association, Ltd.

Sole European Agents :

A. J. MILLS & CO., Ltd.

Produce and Canned Goods Department

14, TOOLEY STREET LONDON, S.E.1.

And at

Birmingham, Bristol, Cardiff, Glasgow, Leeds, Leicester,
Liverpool, Manchester, Newcastle-on-Tyne



The 1923 Display Material
for
“**MINERAL SPRING**”
EFFERVESCENT HEALTH GRANULES”

THE complete assortment of display material shown above (tins excepted) will be sent free if you order your season's supply of "Mineral Spring" now. When the display sets are distributed it will be impossible to arrange for a reprint.

The large three-fold screen measures 2' 10" by 1' 9" and the other items are photographed in correct proportion.

1/- tins, 8/- doz. 2/- tins, 16/- doz. For 5 gross lots prices are 7/6 and 15/-.

THOMAS KERFOOT & CO LTD
BARDSLEY VALE, LANCASHIRE,
& Bardsley House, London, N.1
ESTABLISHED 1797.

COPYRIGHT

DIFFERENT because BETTER

HOOKER'S Malted Milk is different from all competitive preparations in the important sense that it is BETTER—better by analysis as well as by every other criterion by which Malted Milk can and should be judged.

To stock on any principle but quality selection is, therefore, to risk depriving one's customers of the widely advertised dietetic advantages of HOOKER'S Malted Milk, and sacrificing needlessly the additional profit associated with its handling.

Advertising
Material
Supplied
Gratis.

Hooker's

MALTED MILK

Thew,
Hooker &
Gilbey, Ltd.,
Buckingham.

H.T.7

Good profits from a good article

M.O.F. has behind it a 40 years' reputation as a pure, economical food for infants and invalids.

To-day, stimulated by an extensive advertising campaign, the demand for

it is increasing all over the country. You can sell M.O.F. to your customers, and sell it quickly. Are you taking advantage of the extra profit which is yours for the asking?



SCOTT'S M.O.F. FOOD

One thousand doctors recommend it.

Fixed Retail Price
per 1/9 tin.

Send your order to-day
through your Whole-
saler, or direct to
A. & R. SCOTT, Ltd.
Colinton - Midlothian
(Makers of Scott's
Porridge Oats).

REDUCTION IN PRICE

The FRENCH Natural Mineral Water

VICHY-CELESTINS

and the other State Springs of Vichy.

We beg to inform the *TRADE* that the prices of the above
as from the 16th April, 1923,

will be as follows :

| | | | |
|--|---|------|-----|
| Large Bottles— | | | |
| 16/- per dozen, or 65/- per case of 50 | | | |
| Small Bottles— | | | |
| 12/3 | „ | 50/- | 50 |
| Split Bottles— | | | |
| 7/3 | „ | 58/6 | 100 |

Terms : STRICTLY NET.

The reduced MINIMUM RETAIL PRICES
(P.A.T.A.) have been fixed as under :—

| Large. | | Small. | | Splits. | |
|----------|---------|----------|---------|----------|---------|
| Per doz. | Per 50. | Per doz. | Per 50. | Per doz. | Per 100 |
| 20/- | 79/- | 15/- | 60/- | 9/- | 70/- |

These Waters are largely prescribed
by Physicians, and Chemists would do
well to have an ample stock on hand.

PAMPHLETS, SHOWCARDS AND DUMMY BOTTLES
FORWARDED ON APPLICATION.

CAUTION.—Each bottle from the STATE SPRINGS
bears a neck label with the word "VICHY-ETAT"
and the name of the SOLE AGENTS :—

INGRAM & ROYLE, LTD.

Bangor Wharf, 45 Belvedere Road, LONDON, S.E.1.

Telephone : HOP 4343 (2 lines). Telegrams : "Ingram Royle, Watloo, London."

LIVERPOOL : 19 South John Street.

BRISTOL : Bath Bridge.





The
**HENNA
CULT**

of Hair Beauty, based
on the famous

EVAN - WILLIAMS
ORIGINAL
HENNA SHAMPOO

daily extends its boundaries, and is now a subject for popular journalism.

It pays to sell this famous line.

You will find full details of terms and prices in the current issue of "THE SHAMPOO SALESMAN," a copy of which is gladly sent on request.

Be sure to order

THE EVAN WILLIAMS ORIGINAL
Henna Shampoo

Wholesale only:

THE EVAN-WILLIAMS CO., LTD.
18 Ogle Street - LONDON, W.1.

"Specialty"
**PETROLEUM
JELLIES**

*Are you getting
Best values?*

There is only one way of answering this question satisfactorily to yourself: send for our samples and latest prices.

It is because we are one of the largest Importers of Petroleum Products that we can quote such keen prices without departing in the slightest degree from our standard of high quality and uniformity.

"Specialty" Petroleum Jellies are supplied in bulk and in decorated $\frac{1}{2}$ -lb and 1-lb. tins.

*It is worth while
writing to*

Specialty Dept.
Anglo-American Oil Co. Ltd.

Albert Street, Camden Town,
London, N.W.1.

Telegrams:
"Nufinjol, Norwest, London."

Telephones:
Hampstead 4046-4047.

DEARBORN (1923) LTD.**37 Gray's Inn Road,
LONDON, W.C.1.****Toilet Specialties.**

| | Price per doz. to Retailer | Selling Price P.A.T.A. |
|--|----------------------------------|------------------------------|
| PILENTA SOAP <i>A complexion soap.</i> | 10/- | 1/- |
| PROLACTUM <i>For the lips.</i> | 10/- | 1/- |
| PARSIDIUM JELLY <i>For wrinkles.</i> | 10/- | 1/- |
| ALLACITE OF ORANGE BLOSSOM <i>A dressing cream.</i> | 22/6 | 2/6 |
| BORANIUM <i>A hair tonic.</i> | 22/6 | 2/6 |
| CLEMINITE <i>For a face lotion.</i> | 22/6 | 2/6 |
| COLLIANDUM <i>For a face tint.</i> | 22/6 | 2/6 |
| PERGOL <i>A deodorant.</i> | 22/6 | 2/6 |
| TEKKO PASTE <i>Camphor cream.</i> | 22/6 | 2/6 |
| STALLAX <i>For a shampoo.</i> | 22/6 | 2/6 |
| JETTALINE <i>For clearing the skin.</i> | 31/6 | 3/6 |
| PHEMINOL <i>A depilatory.</i> | 36/- | 4/- |
| MENNALINE <i>For the eyelashes.</i> | 36/- | 4/- |
| MERCOLIZED WAX <i>A face cream.</i> | 31/6 | 3/6 |
| STYMOL <i>For oily complexions and blackheads.</i> | 36/- | 4/- |
| SILMERINE <i>Hair-curling fluid.</i> | 22/6 | 2/6 |
| BARSYDE <i>Dandruff eradicator.</i> | 22/6 | 2/6 |
| TAMMALITE <i>For grey and faded hair.</i> | 22/6 | 2/6 |
| LIQUID PERGOL <i>To check excessive perspiration locally.</i> | 31/6 | 3/6 |
| BICROLIUM <i>For whitening the hands.</i> | 22/6 | 2/6 |
| HARAPOSA <i>Nut oil shampoo.</i> | 22/6 | 2/6 |
| COCONOIDS <i>For figure development.</i> | 31/6 | 3/6 |

The Products of**Messrs. PARKER, BELMONT & CO.**

| | | |
|-------------------------------|------|-----|
| CLYNOL BERRIES { | 36/- | 4/- |
| <i>For obesity.</i> | 58/6 | 6/6 |
| SOFT PALERIUM ... | 45/- | 5/- |
| <i>For wrinkles.</i> | | |
| LIQUID NAIL POLISH ... | 10/- | 1/- |
| <i>Brilliant and lasting.</i> | | |

Stocked by ALL Wholesale Houses.**COLONIAL DEPOTS AND AGENCIES.**

Australia: ALL WHOLESALEERS, & DEARBORN (Australia), Ltd., Grace House, Clarence Street, Sydney.
South Africa: LENNON Ltd, Cape Town, etc.
India: FRAMJEE & SON, Bombay.
 SMITH, STANISTREET & CO., Calcutta.
New Zealand: SHARLAND & CO., Auckland & Wellington.
South America: DEARBORN (South America), Ltd., Calla Salta 264, Buenos Aires.
Straits Settlements & Federated Malay States: MEDICAL WALL, Ltd., Singapore.

Ma Chérie

(REGD.)

**Toilet Preparations
and Perfumery.**

FACE POWDERS 4 shades—White, Rachel, Chair (Natural) and Rose. Three sizes
4/6, 6/6, 10/6 doz.

SOLID POWDERS In 10 shades—White, Rachel, Naturelle, Rose, Rouge, Incarnat, Rouge Foncé, Rouge Brunette I, Rouge Brunette II, and Egyptienne.
In card boxes, with puff ... 4/6 doz.
In gilt metal boxes, with puff 8/6 „

VANISHING CREAM Specially prepared that it may be used as a Day or Night Cream—a real Skin Food in All China Pot, each pot in carton. 10/6 doz.

SOAP LEAVES 40 leaves in a book. Sell at sight to all golfers, motorists, doctors, etc. Invaluable for washing in emergency as these can be carried in pocket book. Antiseptic and delightfully perfumed. 30/6 gross.

SHAMPOO POWDERS Each shampoo contains sufficient for 3 wet shampoos. Unbeatable for quality and price. 12/6 gross.

TOOTH PASTE Specially prepared and sweetened with Saccharin to ensure that no anti-dental constituent is contained in its manufacture. 8/6 doz.

DIPLOMAT Regd.
SHAVING STICK in nickel case, 8/6 doz. **RELOADS** for above in cardboard outer, 4/3 doz. (reduced wholesale price).

MA CHÉRIE BATH SOAP 6 in box, assorted perfumes and each tablet packed separately. 5/6 doz. (reduced wholesale price).

MA CHÉRIE BATH SOAP (New Shape) Made absolutely flat. Will not slide about, each tablet cellophane wrapped. 4 in box assorted perfumes. 6/6 doz. (reduced wholesale price).

NOTE.—In cases where we have reduced wholesale prices P.A.T.A. prices remain as heretofore. Cash discounts and "all goods carriage paid" is not affected by reductions.

MA CHÉRIE BATH SALTS 60/6 doz.
40 oz. in glass stoppered jar.

*We are Exhibiting at the***DAILY EXPRESS
WOMAN'S EXHIBITION**

OLYMPIA, LONDON,

APRIL 12th to MAY 5th, 1923.

STAND 41.

ROW B.

MA CHÉRIE, Ltd.

London House : 35 Crutched Friars, E.C.3

IMPORTANT NOTICE.**"HUMAGSOLAN"**

(REGISTERED TRADE MARK.)

DR. ZUNTZ'S WORLD FAMED HAIR-FOOD.**GREAT BRITISH CAMPAIGN NOW COMMENCES.**

WE have the pleasure to announce to members of the chemists' profession that this all-British Company having secured the all-British rights in the world-famous HUMAGSOLAN hair tonic nutrient which sells in tens of thousands of bottles in countries throughout the world, we are now launching

A VIGOROUS PRESS CAMPAIGN

to establish HUMAGSOLAN as the one medically endorsed and scientifically approved hair grower. HUMAGSOLAN is, of course, on the P.A.T.A. list.

Watch the announcements in the national papers.

We shall create a public demand first and when this demand is established, the trade will know that they can order HUMAGSOLAN, for there will be customers waiting to be satisfied.

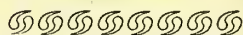
Our travellers will be calling on you later. Meanwhile we shall be pleased to furnish you with full particulars regarding HUMAGSOLAN, trade terms, etc., immediately on hearing from you.

HUMAGSOLAN LIMITED.

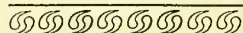
(Sales Promotion Dept.), FARADAY HOUSE, 10, CHARING CROSS ROAD, LONDON, W.C.2

"Jackel's Cream"(without Grease)
for THE HAIRSold Everywhere
Established 1883.

CRYSTALLISED
7 oz. CREAM 10 oz
Trade Mark attached to each
bottle.



"Jackel's Cream" fixes the hair in any desired position; is unexcelled as a dressing and does not soil the headwear. It removes Scurf and Dandruff, keeps the scalp healthy, and promotes the natural growth of the hair while maintaining its softness and brilliancy.



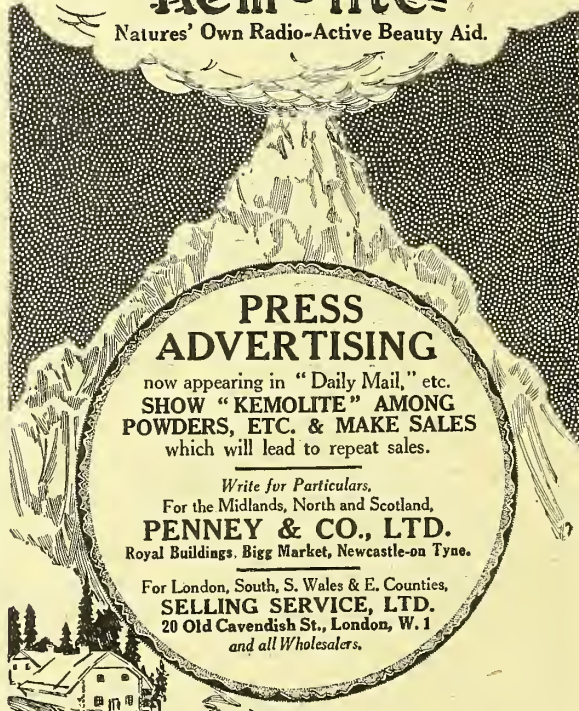
Prices for Wholesale and Export
Houses on application.

Jackel et Cie (of Paris)
Ltd.

Sauchiehall Street,
GLASGOW.

£600 PRIZES COMPETITION
and Prizes for Chemists. (See Trade Booklet.)**Kemolite**

Natures' Own Radio-Active Beauty Aid.

**PRESS
ADVERTISING**

now appearing in "Daily Mail," etc.
**SHOW "KEMOLITE" AMONG
POWDERS, ETC. & MAKE SALES**
which will lead to repeat sales.

Write for Particulars.

For the Midlands, North and Scotland,

PENNEY & CO., LTD.

Royal Buildings, Bigg Market, Newcastle-on Tyne.

For London, South, S. Wales & E. Counties,

SELLING SERVICE, LTD.

20 Old Cavendish St., London, W. 1

and all Wholesalers.



Frozoclone

REGD.

The Original and Best
SOLID EAU DE COLOGNE

has many imitators but no equal.

Its elegance and utility appeal to all.

Made from the finest Eau de Cologne. Refreshing when rubbed on the forehead, pleasant as a smelling bottle, invaluable in a heated atmosphere and when travelling. A real acquisition to every household. Excellent after shaving. A boon to those in hospital.

In Green Bottles, Registered.

RETAILS AT **3s. 6d.** Minimum (P.A.T.A.) PER DOZEN **32/-**

SPECIAL TERMS FOR BONDED SHIPMENT OF 4 gross minimum.

SOLID ENGLISH LAVENDER

Similar size and packing
as "FROZOCLONE"
but in **BLUE** glass.

TERMS AS FOR FROZOCLONE.



THE IDEAL FRUITY LAXATIVE

In Pastille form. Delicious, Reliable, Effective.

Retails at **2s. 3d.** minimum.

Per dozen **21/-**

REDUCED PRICES FOR EXPORT.



The Nail Polish

with new and distinctive features.
Softens the cuticle. Brilliant polish.

Retails **1s. 9d.** Per Dozen **15/-**

R. DEMUTH'S LABORATORIES

68 Salusbury Road, and Montrose Avenue, LONDON, N.W. 6.



TRADE MARK.



Parfumerie

Paris

Bourjois

The Celebrated

**Ashes
of
Roses**

(Solid Face Powder)

Price: 15/- per doz.
P.A.T.A. Price: 1/9 per box.

A. Bourjois & Cie, Ltd., 66 Carter Lane, London, E.C. 4.

Also manufacturers of the famous POUDRE de RIZ de JAVA { No. 45, 10/- per doz. P.A.T.A. 1/3 per box.
No. 495, 7/- per doz. P.A.T.A. 10d. per box.

STILL ON THE RISE



The demand for Anzora Cream and Anzora Viola is still increasing. Join the stockists to-day. Trade Terms, 12/- doz., retail at 18/-; 20/- doz., retail at 30/- From all Wholesalers.

Showcards on request.

ANZORA Perfumery Co., Ltd.,
Willesden Lane, LONDON, N.W.1.

"SAMBOY" HAIR TONIC

is made from the purest materials which combined, provide a genuine tonic, unrivalled in its beneficial effect upon the hair and scalp. It is called "a wonderful grower," and may be used by young and old without harm; is especially good in relieving irritation, and cleansing the scalp. It preserves the colour of the hair.

To be obtained from maker on sale or return terms, but is a ready seller. Everyone likes "Samboy."

"SAMBOY," 22 STRAND, RYDE, I.W.

SPECIAL OFFERS for APRIL

BATH SOAP abt. 4½ ozs. **2/7½ doz. tabs.**
TOILET SOAP 2½ ozs. **1/10½** ..

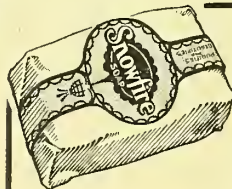
Finest Quality, 1 dozen Assorted in Box.

Original Cases of 30 doz. only.

Nett Cash with Order. f.o.r. London.

Samples (post free) Sixpence.

**PAUL TRANOY, 33 CHINGFORD ROAD,
LONDON, E.4.**



A Soap with the "SNOWFIRE" Prestige

"Snowfire" Soap will draw custom to your shop. Free from alkali and containing special emollient properties it can be safely recommended for baby's delicate skin or as a toilet soap for the promotion of skin health for either sex. A soothing soap for tender skins that sells on its merits.

Write to-day
for terms.
F. W.
HAMPSHIRE
& CO., Ltd.,
Riverside Works,
Derby.

Snowfire SOAP

is well advertised, offers liberal profits and will prove a custom-drawing addition to your stocks.

Nothing is too good for
your customers_____

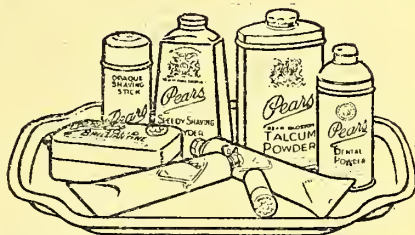
*Why not give them
the very best?*

Pear's

GOLDEN
SERIES

The Regalia of the Toilet.

A. & F. PEARS, Ltd., 71-75, New Oxford St., London, W.C.1



SPONGES

Were you satisfied with the last consignment of

SPONGES

which you purchased? Did they come up to Sample?

If not then get into touch with us before placing your next order.

We sell FIRST GRADE GOODS ONLY—
IMPORTED DIRECT FROM THE
MEDITERRANEAN.

It will pay you to send your enquiries to—

H. M. COHEN & Co., 32 Minories, E.1

SPONGES

SPONGES

SPONGES



Sorbo Sponges go on Selling

YOU can't "get left" with a stock of Sorbo Sponges—they sell steadily year in and year out. Every single person who washes needs a Sorbo—the inexpensive rubber sponge that is improved by soap.

The demand is so great that we have had to reorganize our factories, and this has enabled us to make really big reductions in the price of Sorbo Sponges.

Remember that every Sorbo Sponge you sell means a clear 33 $\frac{1}{3}$ % profit to you.

Everybody has read or heard about Sorbo Sponges. Put the showcard in your window, and they will come in and buy them—from you.

Get in a stock of assorted sizes now.

SorboSponge

THE MOST ABSORBENT RUBBER SPONGE

Retail Prices: No. 1, 1/-; No. 2, 1/9; No. 3, 2/6
No. 4, 3/9. Bath Sizes: No. 4R 5/-; No. 5, 7/6

SORBO RUBBER-SPONGE PRODUCTS, LTD.

Sorbo Works, Woking, Surrey.

London Office - - - 24 Walbrook, E.C.4.

OUR SPONGES AGAIN Considerably Reduced in Price.

Competition Defied.

WRITE FOR SAMPLES AND PRICES
OR CALL AND INSPECT OUR STOCK.

New Showrooms and Warehouses:
25 FINSBURY ST., CHISWELL ST.,
LONDON, E.C.2.

Telephone - - - CLERKENWELL 5428.

The
Sponge Fishing & Importing Co., Ltd.
(Société Anonyme pour la Pêche et l'Importation des Éponges)
Incorporated in Belgium.
Buying Branches at Sfax, Tripoli, Kalymnos-Symi, Hydra,
Batabona, Nassau and Florida.
Selling Branches at Brussels, Paris, Barcelona and Hamburg.
No connection whatever with any other Firm.

PERFUMERS—SAVE LABOUR!

Headquarters for:

Vanishing Creams, Shampoo Powders, etc., in bulk or packed.
Samples and prices on request. Makers of the "O-Pine-O"
Toilet and Household Soaps. The special feature of these
soaps is that they contain all the natural Glycerine.

A trial will convince as to the very high quality of these goods.
"O-PINE-O" MFG. CO., LTD., Montague Rd., Hornsey, London, N.8.



SHADEINE FOR COLOURING GREY HAIR

This popular article is largely advertised
and stocked by all Wholesale Houses.
Trial Size 8d., per post 10d. 1/4 size, per post
1/7; 3/8 size, per post 2/11; 3/9 size, per post 4/6;
8d. size, 6/- doz.; 1/4 size 12/- doz.; 2/6 size,
24/- doz.; 3/9 size, 36/- doz.

THE SHADEINE CO., 58 WESTBOURNE GROVE, LONDON, W.

G. B. KENT & SONS, LTD.

Are known the World over as
the Largest Manufacturers of

BEST BRITISH BRUSHES

Please write for full Particulars to—

75 Farringdon Road, E.C.1.

JAKSON'S PEPPERMINT, LAVENDER & CAMOMILE OILS are the BEST.

Produced and Prepared by
**THE LARGEST GROWERS & DISTILLERS
IN ENGLAND.**

Distillery:
J. JAKSON & CO. (Mitcham Rd., 1921), LTD.
Mitcham Road, WEST CROYDON.

AGENTS for the U.K.:
F. NEWBERRY & SONS, LTD.
27 & 28 Charterhouse Square, London, E.C.1

Genuine Nice





CASTEL'S
Genuine Nice
OLIVE OIL

In buying Castel's Olive Oil, you buy best Nice Oil only—guarantee I fully by the refiners, a firm with a big reputation, established in Nice for 122 years. There is no Oil better—few as good.

OLIVE OIL



Write to-day for New Season's Prices.

Rayner & Co. Ltd.

Stocks in London,
Liverpool and Glasgow.

NORTH ROAD - LONDON, N.7.

Talcum Powder

⊗ OF ALL GRADES ⊗
FOR ALL PURPOSES

FOR SAMPLES AND PRICES APPLY TO:
W. Harrison & Co., Ltd.
16 MINCING LANE, LONDON, E.C.3;
And at
14 MARKET PLACE, MANCHESTER.

CHICAGO HAIR DYE

Do you know where to obtain?
MADE IN FIVE SHADES.

Sole Proprietors: **SINGLE, DALBY & CO.,**
42 Oldham Rd., Manchester.
Telephone . . . 5747 Central.

VAL-ROSA VANISHING CREAM

To be largely advertised in ladies' papers and "The Tatler."
12/- PER DOZ, 1/6 PER POT RETAIL.

A really high class cream.
THE VAL-ROSA CO., 53 Kirkstall Rd., Leeds.

DODGE & OLCOTT CO., 20 MARK LANE, LONDON, E.C.3.

THE "D & O" BRAND
is the "Standard of Quality" for

OILS of BAY, CEDARWOOD, PATCHOULI, PEPPERMINT,
SASSAFRAS, ETC.

BALSAMS of Copaiba, Peru, Tolu.
TONKA BEANS, Angosturas.

Phone—
CITY 2468.

Telegrams—
"EGDARF, FEN, LONDON."

Petroleum Jelly

White, Yellow, Amber,
& Ruby Red, for all
Pharmaceutical and
Veterinary purposes

MEADE-KING, ROBINSON & CO., LTD.
LIVERPOOL - LONDON - MANCHESTER - LEEDS.

ADEPS LANÆ, P.B.

THE FINEST BRITISH LANOLINE PRODUCED

IS MANUFACTURED BY

THE PHARMACEUTICAL LANOLINE CO.

Carnwath Road, Fulham, London, S.W.6.

Telephone : Putney 42.

WHO INVITE ENQUIRIES.

Telegrams : "Batapo, Walgreen, London."

PETROLEUM JELLY.

Gough, Kidston & Co.

*Chemical Manufacturers,
Tanning & Dyewood Materials & Extracts,
Gum & Wax Merchants,*

Tel. No. :
Minorities 2666 and 2667.

Tel. Add. :
"Kidstonism,
Bilgate, London."

43/45 Gt. Tower Street, London, E.C. 3.

WORKS :
BERMONDSEY.

Tel. No. : Hop 2029.

PETROLEUM JELLIES

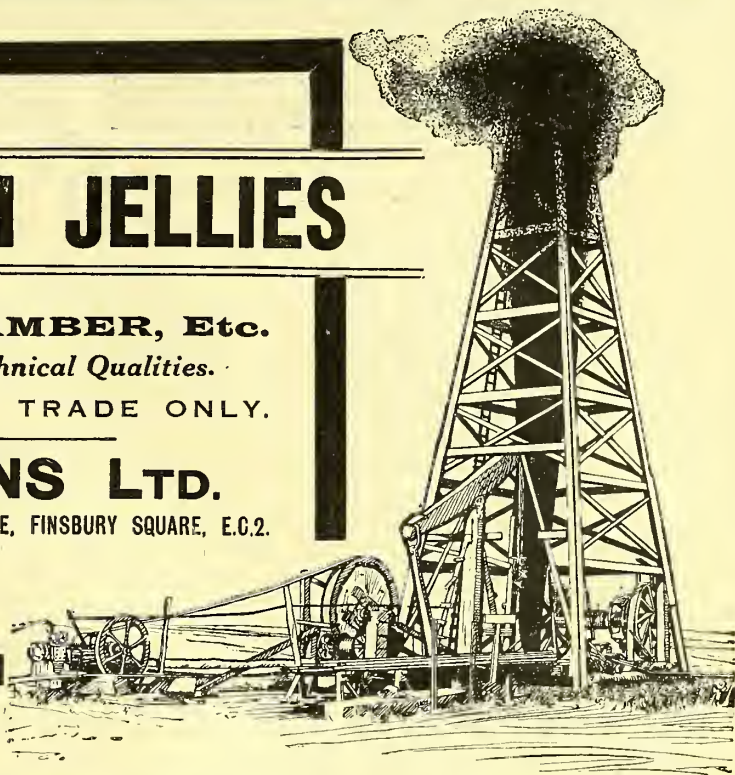
WHITE, AMBER, Etc.

B.P. and Technical Qualities.

WHOLESALE TRADE ONLY.

STERNS LTD.

80 ROYAL LONDON HOUSE, FINSBURY SQUARE, E.C.2.



LIQUID
PARAFFIN B.P.
TOILET PARAFFIN
BRILLIANTINES
OLIVE OILS
HONEY
EUCALYPTUS OIL

Send your enquiries to

REDDGRAVE BUTLER & CO., Ltd.
Park Lodge,
Forest Lane, Stratford, London, E.15



C. W. JOHNSON & CO.

Woburn Lodge

Upper Woburn Place, W.C.1.

Direct Importers.

Packed and Bulk.

Prices and Samples on application.

Telephone

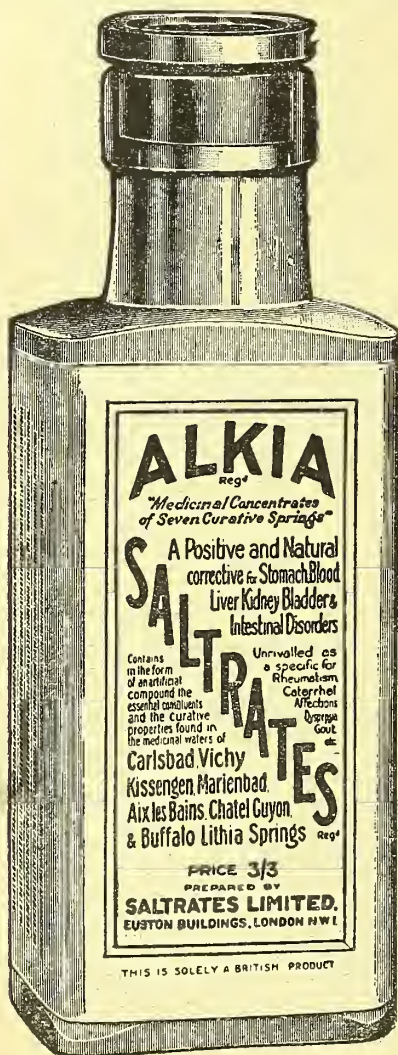
Museum 5774

Two Lines which you, Mr. Chemist

They always mean a pleased and satisfied Customer

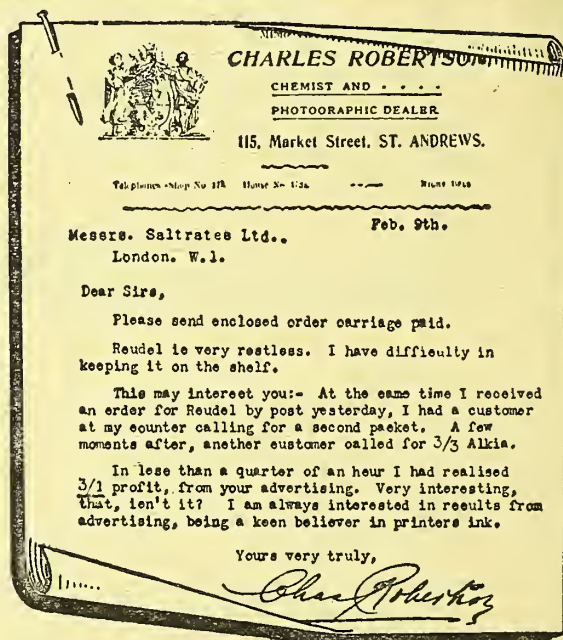
With the help of our advertising you have
second and each successive sale is assured

SOME TRULY REMARKABLE



ALKIA SALTRATES.

A widely advertised and quick selling product, which represents the maximum of possible efficiency in a saline, and the best value obtainable for the money. Being highly concentrated, exceptionally small doses are sufficient, and there is no trace of any salty or other unpleasant taste. Protected on P.A.T.A. at the full face value of 3/3 a large bottle.



WHAT PROMINENT

JIMMY WILDE, World's Champion Boxer :-

"I am glad to testify to the part your Saltrates fulfil during my training periods. I am never without both and never will be."

A. F. (PEGGY) BETTINSON, Founder and Manager National Sporting Club :-

"I have no hesitation in recommending both Alkia Saltrates and Reudel Bath Saltrates for all disorders arising from uric acid, uric acid, uric acid. Personal use satisfies me that no other preparations can equal your product for the elimination of the many ailments for which you advocate their use. You have liberty to use my testimony in any manner desired."

BOMBARDIER BILLY WELLS, the popular boxer :-

"While a physical instructor in the army I found both Alkia and Reudel to be almost indispensable for correcting and preventing the ill-effects of pains to which Tommies are subject. Personally I take Alkia regularly and Reudel is always added to my bath."

We have hundreds of similar letters which

YOU CAN STOCK THESE GOODS

Carriage paid in United Kingdom on orders for 3 dozen, which is sent free on request. Display them in your window, and attract

an Recommend with Full Confidence

cause they do exactly what our advertisements say.

these products the first time only. The quality of the goods themselves.

ESTIMONY FROM CHEMISTS

W. CORNISH, M.P.S.
THE PEOPLE'S CHEMIST
 The Oxford Pharmacy 188 Lower Ashley Rd.
BRISTOL

Messrs. Saltrates Ltd.,
 London, W.1.
 April 24th,

Dear Sirs:- I was reading through reproduction of Mr Robertson's (St Andrews) letter on page twelve of to-day's date Chemist & Druggist and I think this afternoon I surpassed his feat. In my shop as above. Four customers following, purchasing Saltrates preparations, as follows

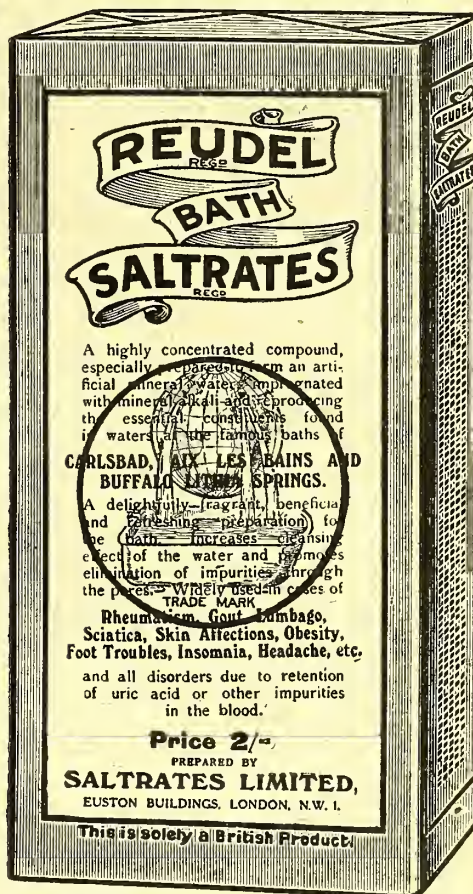
| | |
|---------------------------|----------|
| 2/- Reudel Bath Saltrates |) All in |
| 3/3 Alkia Saltrates |) five |
| 2/- Reudel Bath Saltrates |) minute |
| 3/3 |) or so. |

Later on in the day I was asked for another 2/- else Reudel, but in this case the customer would not take the 3/3 size, so I missed the sale, having just sold the last small package. I am quite prepared to admit that this is a coincidence that does not often occur, and probably was in part due to other brother Pharmacists being "Sold out." But your preparations are always good sellers with me.

I thought the foregoing would interest you, and it is absolutely authentic, as my Lady Assistant can witness. If the "Fale wants adorning" and I may "point a moral", I would say never load up your shelves with goods that stick there, but to borrow Mr Robertson's "Natty phrases fill up with "restless" goods, which are restless to the point of removal for "Cash Till Good".

With compliments,
 Yours faithfully, *W. Cornish*

REUDEL BATH SALTRATES.



REUDEL
BATH
SALTRATES

A highly concentrated compound, especially prepared from an artificial mineral water impregnated with mineral salts and producing the essential conditions found in waters of the famous baths of CARLSBAD, VICHY, LES BAINS and BUFFALO SPRINGS.

A delightfully fragrant, beneficial and refreshing preparation for the bath. Increases cleansing effect of the water and promotes elimination of impurities through the pores. Widely used in cases of RHEUMATISM, GOUT, LUMBAGO, SCIATICA, SKIN AFFECTIONS, OBESITY, FOOT TROUBLES, INSOMNIA, HEADACHE, etc., and all disorders due to retention of uric acid or other impurities in the blood.

Price 2/-
 PREPARED BY
SALTRATES LIMITED,
 EUSTON BUILDINGS, LONDON, N.W. 1.
 This is solely a British Product.

SERS SAY :—

G. GEORGE, World's Champion Runner :—

have used Alkia and Reudel with remarkably good results. They are perfect products, as everyone to whom I have recommended them agrees."

K DONALDSON, World's Champion Sprinter :—

Alkia has no equal for rheumatic and uric acid disorders of all kinds. Reudel bath will keep the joints more supple than a dozen Turkish pour baths. I could not do without them both."

EENE CORRI, of the National Sporting Club and the World's Premier Referee :—

have used both of your Saltrates compounds with the best possible results. Alkia is, in my opinion the ideal saline and Reudel could not be improved upon."

lack of space prevents our re-printing here.

GUARANTEED SALE TERMS

assorted. Handsome Showcards of strong selling power and business from our present extensive advertising campaign.

The most widely advertised and best selling line of its kind. Unequalled as a fragrant, refreshing, beneficial and all-round satisfactory preparation for the bath or for general toilet purposes.

Especially recommended in cases of foot trouble or rheumatic pains, stiffness, etc. Always extensively advertised.

Protected on P.A.T.A. at the full face values of 2/- and 3/3 (double size).

CLINICAL THERMOMETERS

BEST ENGLISH MAKE GUARANTEED.
Verified and Stamped at National Physical
Laboratory, Kew.

The "EMPIRE" Brand.

| (Ordinary Pattern). | | | s. | d. |
|--------------------------|-----|----------|----|----|
| Hospital pattern | ... | per doz. | 19 | 0 |
| 60-seconds, " lens front | ... | " | 21 | 0 |
| 60-seconds, plain | ... | " | 22 | 0 |
| " lens front... | ... | " | 24 | 0 |
| 30-seconds, plain | ... | " | 24 | 0 |
| " lens front... | ... | " | 27 | 0 |

The "DUO-IN-UNO."

| (Quick Shake Down). | | | s. | d. |
|--------------------------|-----|----------|----|----|
| Hospital pattern | ... | per doz. | 28 | 0 |
| 60-seconds, " lens front | ... | " | 30 | 0 |
| 60-seconds, plain | ... | " | 30 | 0 |
| " lens front... | ... | " | 33 | 0 |
| 30-seconds, plain | ... | " | 33 | 0 |
| " lens front... | ... | " | 36 | 0 |

Each one in metal case, and packed in a specially designed card box with descriptive label on lid.
Customers can have their names engraved on any of the above Thermometers free of charge.

SPECIAL OFFERS

These offers will expire at the end of May, 1923. You can have any one of these lots, or both if you like, either together or separately, but not more than one lot of each kind.

(No. 1) The "Empire" Brand.

In return for cash 20/- we will send you post free the following assortment of "Empire" brand (ordinary pattern).

| List Price | | | f. | s. | d. |
|--------------------------|-------------------|----------|------|----|------|
| 7 Hospital pattern | ... | per doz. | 19/- | 0 | 11 1 |
| 3 " lens front | ... | " | 21/- | 0 | 5 3 |
| 1 60 seconds, plain | ... | " | 22/- | 0 | 1 10 |
| 1 " lens front | ... | " | 24/- | 0 | 2 0 |
| 1 30 seconds, plain | ... | " | 24/- | 0 | 2 0 |
| 1 " lens front | ... | " | 27/- | 0 | 2 3 |
| 14 Thermometers for 20/- | List price £1 4 5 | | | | |

(No. 2) "Duo-in-Uno" Patent.

In return for cash 20/- we will send you post free the following assortment of "Duo-in-Uno" brand (quick shake-down).

| List Price | | | f. | s. | d. |
|-------------------------|-------------------|----------|------|----|-----|
| 3 Hospital pattern | ... | per doz. | 28/- | 0 | 7 0 |
| 2 " lens front | ... | " | 30/- | 0 | 5 0 |
| 1 60 seconds, plain | ... | " | 30/- | 0 | 2 6 |
| 1 " lens front | ... | " | 33/- | 0 | 2 9 |
| 1 30 seconds, plain | ... | " | 33/- | 0 | 2 9 |
| 1 " lens front | ... | " | 36/- | 0 | 3 0 |
| 9 Thermometers for 20/- | List price £1 3 0 | | | | |

CARRIAGE PAID ON ORDERS OF £3 AND UPWARDS.

A discount of 5 per cent. for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

BURGE, WARREN & RIDGLEY, Ltd.

91 and 92 GREAT SAFFRON HILL,
LONDON, E.C.1.

WILSON (RUBBER) GLOVES

(Advertised in "The Lancet.")

SURGICAL, OBSTETRICAL, AUTOPSY, ACID, ELECTRICAL (10,000 volts), HOUSEHOLD, FINGER COTS.

SUPPLIES BY RETURN from STOCK

Enquiries (Wholesale and Export) to:-

The only accredited Agent
in Great Britain for
THE WILSON RUBBER CO.,
CANTON, O., U.S.A.
The largest exclusive manufacturers of rubber gloves in the world

R. S. BLAKER,
10 CANUTE RD.,
SOUTHAMPTON.



STUBBS

Herbert A. Stubbs

Highest Grade
Compressed

CLOTH BALL

white and all colours
Samples & Prices (P.A.T.A.)

from 6 Crystal Palace Park Rd.
Sudham London, England

J. H. HAYWOOD, LTD.

CASTLE GATE,
NOTTINGHAM.

INVENTORS
OF
SEAMLESS
ELASTIC
HOSIERY.

SURGICAL APPLIANCE
MANUFACTURERS.



Specialities:

Abdominal Belts,
Trusses,
Suspensory Bandages,
Braces,
Elastic Web Bandages,
and Druggists' Sundries.

WRITE FOR PRICE LIST.

ESTABLISHED 1833.

TELEGRAMS: "APPLIANCE NOTTINGHAM."

ZORBO Reg. Brand

ABSORBENT COTTON WOOL

Surgeon's Superfine Quality

THIS Surgical Dressing has been introduced with a view to meeting the demand for a really high-class cotton wool of British Manufacture.

It is made only from long staple cotton, is highly absorbent, and free from all impurities, and through every stage of manufacture the greatest care has been taken, and quality has been the first and only consideration.

To ensure the retailer a reasonable profit, and to protect his customers from the substitution of inferior qualities, "ZORBO" Cotton Wool has been placed on the P.A.T.A. List, so that our friends may have every confidence in pushing this All British Line.

SAMPLES ON APPLICATION

P.A.T.A. PRICES

| | | 1-lb. | 8-oz. | 4-oz. | 2-oz. | 1 oz. |
|---|----------------------------------|-------|-------|-------|----------|------------|
| P.A.T.A. Public Price. | PACKETS ... | 4/6 | 2/6 | 1/4 | 9d. | 6d. each. |
| Wholesale Price to Retailers | | 35/- | 18/2 | 9/4 | 5/- | 2/10 doz. |
| P.A.T.A. Public Price. | CARTONS ... | 5/- | 2/9 | 1/8 | 1/- | 7½d. each. |
| Wholesale Price to Retailers | | 37/- | 20/- | 10/9 | 5/10 | 3/2 doz. |
| P.A.T.A. Public Price. | SEALED TINS, STERILIZED ... | 5/6 | 3/3 | 2/- | 1/6 | — each. |
| Wholesale Price to Retailers | | 42/- | 22/6 | 12/6 | 8/- | — doz. |
| STERILIZED IN SEALED GLASS BOTTLES, 2-oz. ONLY. | | | | | | |
| | P.A.T.A. Public Price ... | ... | ... | 1/9 | each. | |
| | Wholesale Price to Retailers ... | ... | ... | 10/- | per doz. | |

SOLE MANUFACTURERS:

ROBERT BAILEY & SON, LTD.
Marriott Street Mills, Stockport.

Order through your usual wholesaler.

OILED SURGICAL COTTONS OILED SURGICAL SILKS

EDWARD MACBEAN & Co., Ltd.

Manufacturers of Oil-proofed and Rubber-proofed Cloths of every description.

London Office—6 & 8 Lime Street Square, E.C.3.

123-125 Howard Street - GLASGOW.

Telegrams:
"Diamond, Glasgow."
"Stormproof, Ltd, London."

Codes: Lieber's 5-Letter, ABC (5th Edition), and Marconi.

Telephones:
8387 Central,
1995 Central.



**"BULL
DOG"**

Boracic Socks

Finest $4\frac{1}{2}$ d. Sock. Quickest and Largest Sale.

BIGGEST PROFIT

Retail at $4\frac{1}{2}$ d. per pair.

"SPEEDWELL" Boracic Socks

Retail at $6\frac{1}{2}$ d.

Sample Pair and Special Offer. Terms on application to Makers.

Order Socks required by Name either from—

London.—Sangers; Barclay & Sons; F. Newbery & Sons;
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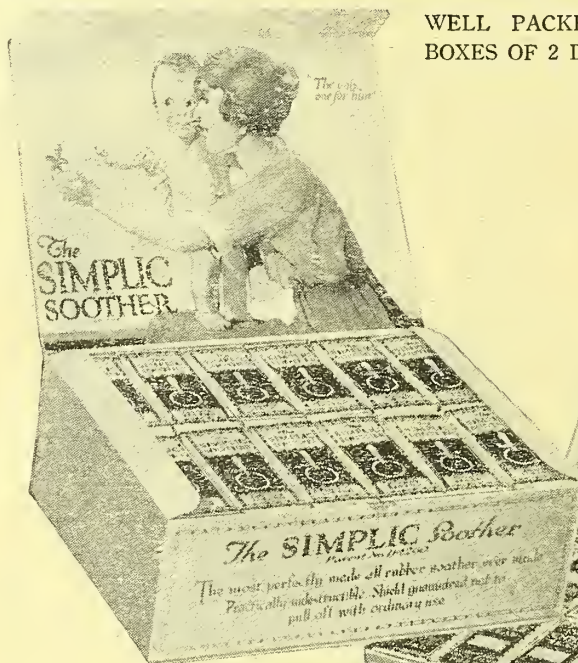
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Made of purest
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No taste or smell.

Practically indestructible.
The most perfectly made
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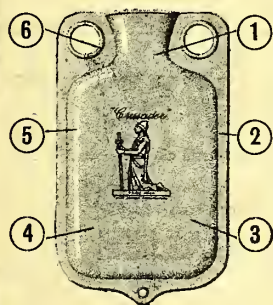
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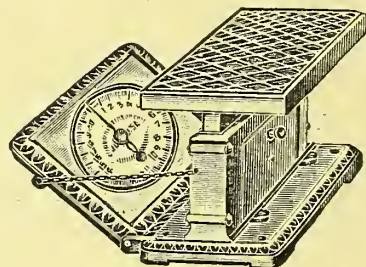
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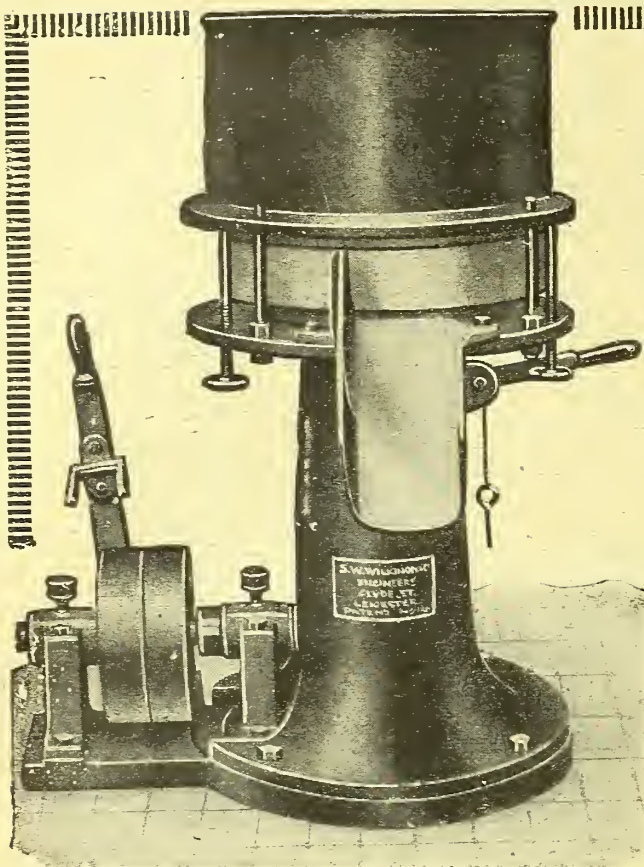
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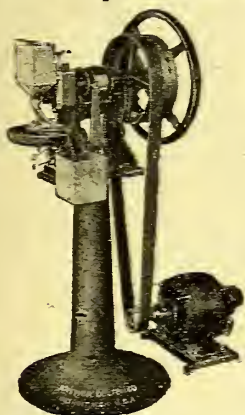
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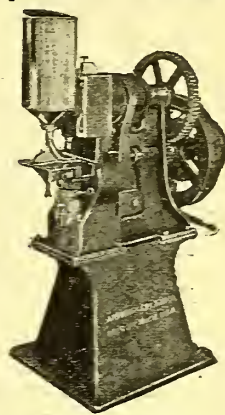
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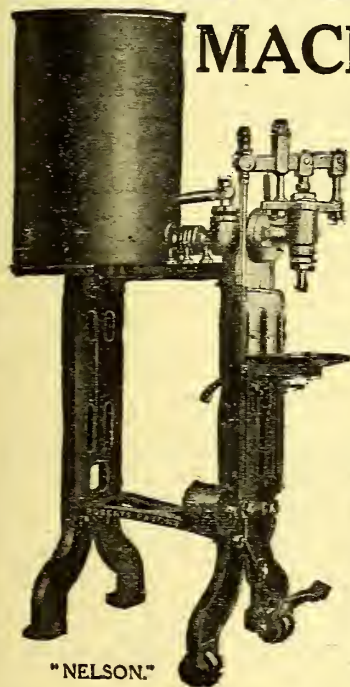
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Don't waste money on imitations, buy **Roberts' Machines** which actually Created the Records for

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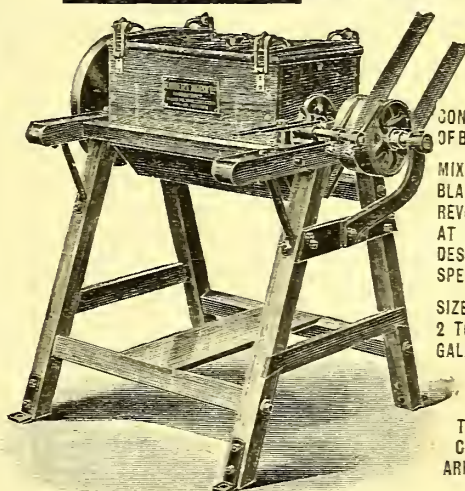
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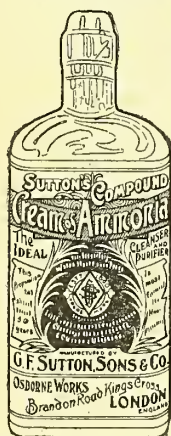
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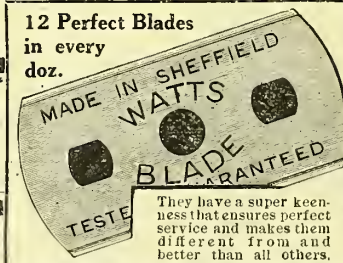
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12 Perfect Blades
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They have a super keen-
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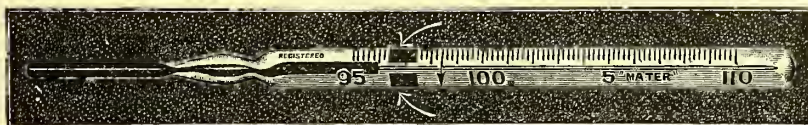
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EASY TO READ. EASY TO SHAKE DOWN.

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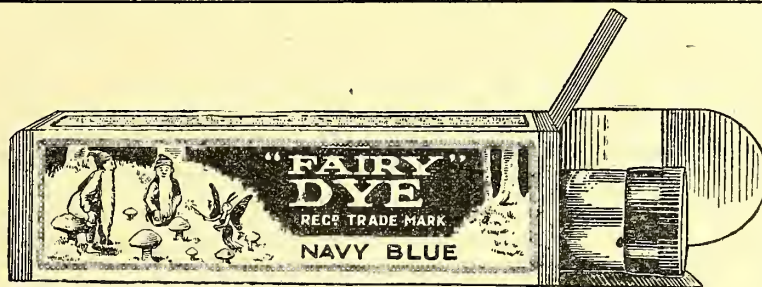
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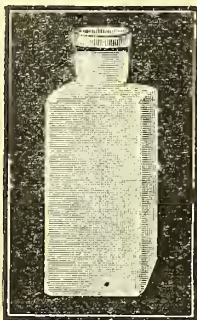
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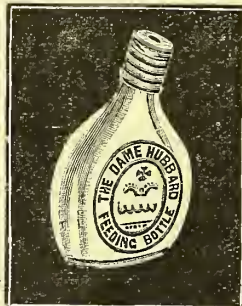
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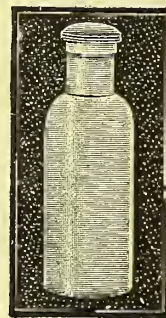
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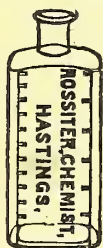
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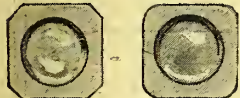
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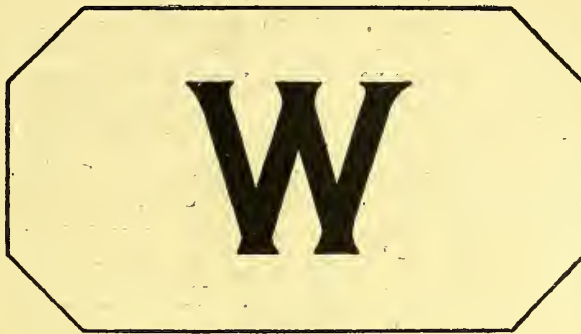
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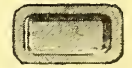
American Flat.



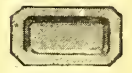
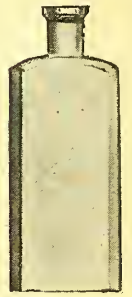
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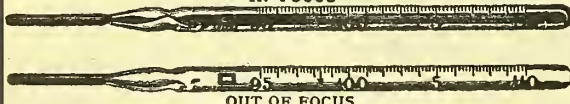
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The REPELLO requires no
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A 30-second pushed back in
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Teat, Valve, and Brush included.
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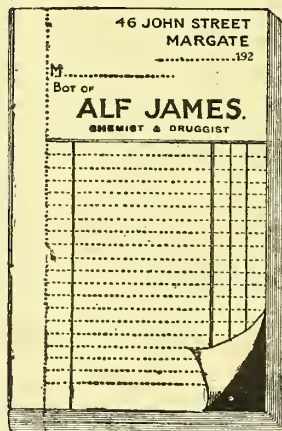
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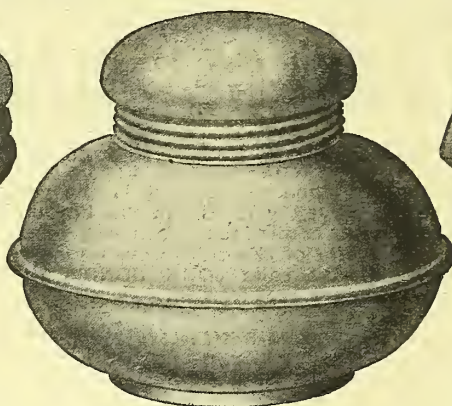
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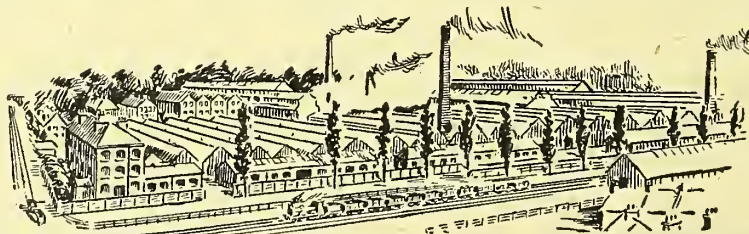
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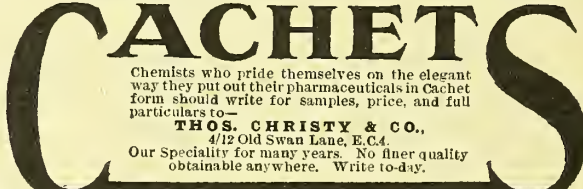
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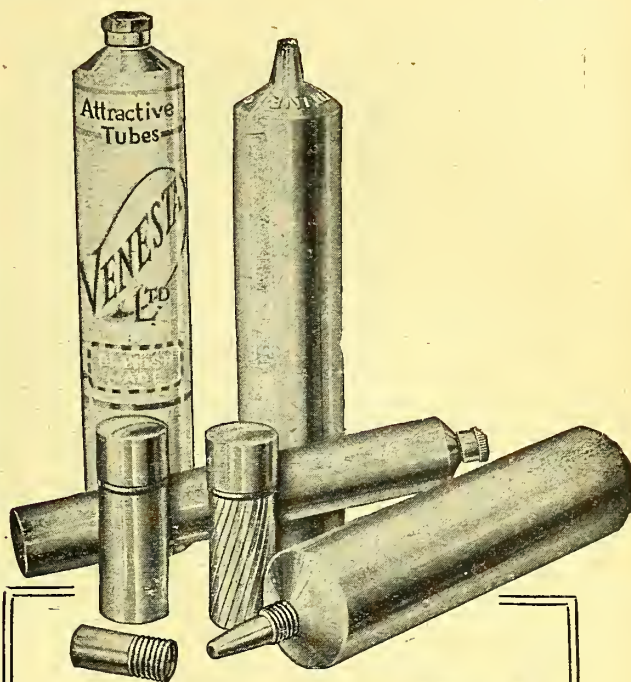
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New Books

Optical Methods in Control and Research Laboratories. Vol. I. Second edition. 9½ in. by 6½ in. Pp. 56 + iv. Limp cloth; 1s. 6d. Adam Fulger, Ltd., 75 Camden Road, London, N.W.1. [This book, by Dr. Judd Lewis, Ph.C., among others, deals with newer applications of optical methods. Part I. is concerned with analysis by emission spectra, particularly in demonstrating rapidly the absence or presence of mere traces of impurities. Section II. deals with absorption spectra and spectrophotometry, and Section III. with the refractometer. The use of the latter is extending in chemical industry as a check on mixing methods. Section IV. is devoted to the many uses of the polarimeter. References are given in each section of recent investigations and standard reference works. There are also three beautiful plates of spectra.]

English and Welsh News

The Editor would be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

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Hull, Central Clinic.—Mr. H. Leggott, chemist and druggist, medical supplies.

Hull, Branch Clinic.—Lofthouse & Saltmer, Ltd., medical supplies.

Nantwich Guardians.—Mr. W. C. Grice, chemist and druggist, drugs.

Poison-licence Application

At a recent meeting of the Maidenhead Town Council the General Purposes Committee reported having considered an application by P. & S. Thompson, Ltd., for a licence under Section 2 of the Poisons and Pharmacy Act, 1908, and were of opinion that the reasonable requirements of the public with respect to the purchase of such poisonous substances were satisfied by local chemists; they recommended that the application be not granted. An amendment was proposed that the matter be referred back, and in the course of the discussion Councillor Upson, remarking upon the argument in favour of an open market for poisons, reminded the Council that many years ago the Legislature recognised that it was not good for the general public to have an open market, and an Act of Parliament was passed under which only persons qualified by passing examinations could deal with such classes of goods. In more recent years the horticultural trade had advocated a freer sale for certain classes of poisons, and this indiscriminate sale of such poisons had led to many disasters. The Town Council had to use a certain amount of discretion, and in the case of deadly poisons like these only men trained to understand exactly the use of them and the possible abuse of them by carelessness or otherwise should be allowed to handle them. A certain class of the community had been expensively trained to handle such poisons, and would the Council agree to allow any Tom, Dick or Harry to do so? Another Councillor, who supported the amendment, suggested that the applicants would keep the same kind of register as a chemist. The amendment was rejected by eight votes to six.

Hull

An epidemic of shop and office letter-box robberies is stated to have broken out in the Old Town.

With snow, rain, thunder, and brilliant sunshine making their appearance in one day, as happened this week, local chemists hardly know what kind of goods to display in their windows.

Gas masks were worn by the firemen engaged in combating a fire at Smith's Sulphur Grinding Mills, Oak Road, Hull, in a place where about 50 tons of sulphur was stored. A quantity of this was destroyed, and damage was also done to machinery on the first and second floors.

Liverpool

A cold spell at the week-end, with promise of snow travelling on from Yorkshire, has revived the demand for winter comforts.

The Williams complimentary dinner (see p. 522) evoked such enthusiasm that the speeches, if printed verbatim, would extend to three ordinary newspaper columns. The original promoter, Mr. John H. Robinson, looked tired next day, but Mr. and Mrs. Ferriday (hon. secretaries) bore their exertions well.

Manchester

Mr. S. Fildes, chemist, has purchased the pharmacy at 172 Claremont Road, Moss Side, lately owned by Mr. Crampton.

The selection of Mr. E. H. Simmons, President of the Manchester Pharmaceutical Association, as a candidate at the forthcoming Council election in London has given great satisfaction. It is felt that in Mr. Simmons we have an excellent pharmacist, who "knows the ropes" (as they say in Lancashire). He has had a wide and varied experience, and is one of the men for whom the future holds great prospects. As a biographical sketch (with portrait) of Mr. Simmons appeared in the *C. & D.*, I., 1922, p. 616, it is unnecessary to recapitulate his career now; but it may be suggested that if elected he will make an admirable councillor, and will not allow the prestige of Lancashire, so admirably carried on by our friend Mr. J. Rymer Young, to diminish. Three members of the Manchester Pharmaceutical Association (the President and Messrs. Cleworth and Goldthorpe) went to Liverpool on April 5 to attend the complimentary dinner to Mr. and Mrs. W. J. Williams. Unfortunately Mr. W. Kirkby, M.Sc., was prevented from being present.

The first match of the present season of the Manchester Chemists' Golfing Society took place at the North Manchester golf links on April 4 (for the President's prize), when nineteen cards were taken out. The afternoon was gloriously fine and, although there were no startling



Photo]

[Cleworth.

Left to right: Mr. J. D. Guest, Mr. A. J. Pidd (President), Mr. E. N. Fox.

results in the play, everyone present enjoyed the outing. The leading scores were:—

| | | | |
|------------------|----------|--------------------|-----------|
| Guest, J. D. ... | 94—14=80 | Gardner, W. J. ... | 99—16=83 |
| Fox, E. N. ... | 97—16=81 | Turner, A. H. ... | 97—24=84 |
| Owens, T. O. ... | 83—1=82 | Cromack, V. ... | 108—24=84 |
| Bury, E. S. ... | 98—15=83 | Aves, J. ... | 93—11=86 |

After tea, the President (Mr. A. J. Pidd), in a pithy speech, said how pleased he always was to be of any help, and it gave him much pleasure to present the first prize to Mr. J. D. Guest, Prestwich; the second prize was awarded to Mr. E. N. Fox, Bolton.

Sheffield

The action of the Minister of Health in proceeding to penalties in connection with the recent testing of Insurance prescriptions, when the cases were so trivial that the Joint Service Sub-Committee only recommended a caution, is looked upon as unfair.

At Sheffield Police Court, on April 4, Mr. E. Haining, chemist and druggist, Gleadless Road, was charged with driving a motor-car at a dangerous speed. The prosecution arose out of an accident at Sharrow Head, in which a man was knocked down by Mr. Haining's car. It appeared that Mr. Haining was trying to avoid a collision with a motor-cyclist, and several witnesses stated that he could not have done anything but swerve. In imposing a fine of £5, the chairman said the magistrates thought the defendant miscalculated what was a safe speed at that point; he was not guilty of wilful misconduct.

Miscellaneous

LONDON VAN-HORSE PARADE.—At the London Van-Horse Society's parade at Regent's Park, on April 2, the turnout of the Crown Perfumery Co., Ltd., was again the recipient of a first-class award, which carried with it a badge of merit.

WINE-LICENCE CONFIRMATION REFUSED.—At a meeting of the Staffordshire Licensing Committee, on April 3, the application of Mr. A. J. West, chemist and druggist, for the confirmation of a wine off-licence granted in respect of the premises, 111 Brettell Lane, Amblecote, Stourbridge, was refused.

DRUG-TRAFFIC CASES.—At Cardiff Police Court, on April 6, Adolf Woltgen, ship's engineer, was fined £50 for having raw opium in his possession.—At Thames Police Court, London, on April 9, Thomas Dillon and Ah Fong, whose occupations were not stated, were respectively sentenced to six months' and three months' hard labour—Dillon for possessing raw opium and Fong in respect of cocaine.

CHEMICAL WORKERS' WAGES.—A meeting of the Joint Industrial Council for the chemical trades has been convened for April 19 at the Ministry of Labour. The question at issue between employers and employed is a proposal to reduce the wages of shift workers by 1½d. an hour, on which question a ballot will have been taken prior to the meeting. The number of workers involved is given as 50,000.

SUMMONSES ADJOURNED.—At Tower Bridge Police Court, London, on April 11, Susan Jessie Busby, caretaker, 26 Burdett Buildings, Westminster Bridge Road, should have appeared in answer to three summonses for illegally procuring morphine, contrary to the Dangerous Drugs Act, 1920, from Mr. Frederick Charles Duggleby, chemist and druggist, 88 Waterloo Road. A detective-inspector, however, said that the woman was too ill to appear, and, at his request, the summonses were adjourned for "a month at least."

PRESERVATIVES IN FOOD AND DRINK.—The medical officer of health for Paddington (London) has presented to the public health committee of the borough a report on the use of preservatives in foodstuffs. Replies to a questionnaire have been received by him from 109 areas, and the following are among the details given: Boric acid in samples of bacon ranges from 2 gr. to 35 gr. per lb., in margarine from a trace to 175 gr. per lb., and in fish pastes from a trace to 105 gr. per lb.; salicylic acid in lemon squash varies from 0.06 gr. to 13.1 gr. per lb., and in jam from 0.07 gr. to 10 gr. per lb.; copper sulphate is found in vegetables up to 10.2 gr. per lb.

IN THE COURTS.—At Bilston Police Court, on April 6, Alfred C. H. York, chemist, was remanded on a charge of indecently assaulting a male child. Bail was refused.—At Rochester City Police Court, on April 7, committal orders were made in respect of two rates claimed from Mr. William Bowers Fitch, chemist and druggist, Eastgate, the orders to be suspended in order to enable the defendant to quit his premises. Mr. Fitch, who was in business before August 1, 1868, stated in court that he had made an assignment for the benefit of his creditors.—At Newmarket Police Court, on April 10, Sir Ernest Horlick, Bt., was fined £20 for driving a motor-car to the danger of the public, and his licence was suspended for twelve months.

Irish News

Brevities

The Medical Hall of Mr. P. J. Ronan, Ph.C., Dunlavin, was raided recently by Irregulars, who carried away shaving soap and bandages.

Mr. David Herriott, Ph.C., Nenagh, has lodged a claim for £40 with the local Urban Council for damage caused to his shop by a bomb explosion.

Mr. J. H. Totton, Armagh County Analyst, has informed the Lurgan Rural District Council that, in future, his fee for analysing water will be £1 11s. 6d. per sample.

Mr. F. G. Smith, Ph.C., has opened a pharmacy in Comber, co. Down. Mr. Smith served in the British Army as captain. He was on active service in Salonika, Macedonia, Palestine, India Frontier and Persia, and received a special mention in despatches for gallantry in action.

Among the appointments of select vestrymen at the Easter Vestry meetings in the North of Ireland were the following: St. Patrick's, Coleraine, Mr. R. F. McCartney, Ph.C.; Belfast Cathedral, Mr. I. W. Nicholl, Ph.C.; St. Peter's, Belfast, Mr. W. C. Dobbin, M.P.S.I.; St. Patrick's, Ballymena, Mr. Huston Lancashire, J.P., Ph.C.

Antrim County Council invite applications before April 23 for the position of analyst under the Sale of Food and Drugs Acts and the Fertilisers and Feeding Stuffs Act. The salary is £200 per annum, with first-class travelling expenses throughout the county. For analysing samples under the Fertilisers and Feeding Stuffs Act, for farmers and others resident in the county, a fee of 5s. for each analysis, payable by the person sending the sample, will be allowed.

Belfast

Mr. R. F. Blake, Belfast, has been appointed analyst to Cookstown Union.

At a meeting, on April 5, of the Belfast Harbour Board the chairman welcomed Mr. William McMullan (Thomas McMullan & Co., wholesale druggists) on his return from a visit to South Africa.

For the last fifty years Mr. Isaac Nicholl, Ph.C., High Street, Belfast, has not missed a Good Friday service at St. Ann's (both as church and cathedral), where he has acted for thirty years as organist and choirmaster.

At Belfast Claims Court, on April 9, Thomas McGuirk, Ph.C., claimed £2,000 for the loss of stock and trade, caused by a fire at Floral Buildings, East Bridge Street, on June 14, 1922. The fire was created by I.R.A. incendiaries. The Corporation admitted malice, and by consent a decree for £520 was given.

The following officers have been elected and installed for 1923 in connection with Galen Masonic Lodge 439, Belfast: W.M., Bro. J. Adams; S.W., Bro. R. G. McKinstry; J.W., Bro. Joseph Moffett; S.D., Bro. James Macauley; J.D., Bro. W. E. Wilson; I.G., Bro. W. J. Stevenson; Secretary, Bro. S. Nevin; Treasurer, Bro. J. A. Bingham. At the recent meeting of the Lodge three brethren from the Galen Lodge, Glasgow, and four from the Galen Lodge, Dublin, were present.

The Corporation has ratified the terms of settlement between the Public Health Committee and the Ulster Retail Drug Trade Association regarding the withdrawal from the Parliamentary Bill of the clause seeking power to open municipal dispensaries. The terms of settlement provide that the Association shall prepare a list of chemists who are available to attend to calls for medicine urgently required at night or on Sundays; that a copy of this list shall be furnished to each medical man in Belfast; copies to be sent to every police station; that the Association will recommend chemists to display a notice showing that such service is available; that the arrangement shall be advertised in the daily newspapers within one month from withdrawal of the clauses in the Bill.

Scottish News

Brevities

Mr. J. L. Gammie, chemist and druggist, has been elected a member of the management committee of the Macduff Shopkeepers' Association.

Two thousand doses of anti-botulinus serum are to be distributed free to Northern farmers by the Highland and Agricultural Society, for inoculation against grass sickness.

Among the successful candidates at the recent examination for the Fellowship diploma of the National Association of Opticians was Mr. Peter Fenton, F.C.S., chemist and druggist, Kirkcaldy.

Dundee

The water-glass trade is in full swing and prices are being badly cut.

Mr. W. Sime, chemist and druggist, has been recommended for the vacancy on the Parish Council.

Owing to the severity of the weather, the medicines mostly in demand are cough mixtures and remedies for rheumatism.

Easter holidays caused a good deal of delay in parcel express traffic. Parcels handed in at London on March 29 were not delivered in Dundee until April 5.

Glasgow

On investigations being made as to the cause of an explosion on the premises of J. and W. Irvine, chemical manufacturers, Lanark Street, Glasgow, recently, it was found that the safe had been blown open.

A lecture, illustrated by lantern slides, on "Standardisation, Chemical, Physiological and Biological," is to be given by Dr. J. Stanley White (Parke, Davis & Co.), at the Royal Technical College, on April 18, at 8 p.m. Pharmacists and others connected with the drug trade are invited to attend.

The Kinninmont Prize Fund Committee proposes to resume this annual competition, which has been suspended since the war, and an examination will be held in Glasgow some time in June. The competition is open to assistants in Glasgow and the West of Scotland who have passed the Qualifying examination "at any time from April two years preceding the date of the examination." The subjects will be physics and botany. Copies of the syllabus, and any further information, may be obtained from the honorary secretary, Mr. Harvey P. Arthur, chemist and druggist, 361 Victoria Road, Crosshill.

The regulation of street trading was raised at a meeting of the Scottish Distributive Trades' Federation in Glasgow on April 7. It was proposed that street trading should be permitted only under licences granted by the local authority; such licences would be granted only under definite conditions, providing reasonable protection of the public from fraud, and in the case of foodstuffs from infection or disease, and the protection of the shopkeeper from unfair competition. It was pointed out that under the Shops Act exhibitions were not entitled to any special privileges with reference to sales, unless as regards the half-holiday, and it was agreed that the enforcement of the hours of sale provided under the Shops Act should be insisted on.

Perth

Among the members of the Perth Rotary Club who took part in a visit to the dye works of J. Pullar & Sons, recently, were Mr. and Mrs. Thomas Harley and Mr. and Mrs. J. J. Forbes. A vote of thanks to the directors was proposed by Mr. Forbes, a past-president of the Club, in which he referred to the educative nature of the visit.

The prizes offered for competition among the pharmacy students of Perth Academy by the Perthshire Pharmacists' Association have been awarded to Messrs. J. Grant and G. Murray (equal), third year students, and to W. Foote, first-year student. Mr. J. B. McDonald, President of the Association, made the presentations. The students were also addressed by Messrs. Thomas Harley and J. J. Forbes.

Poisonings

THE following cases of fatal poisoning, among others, have been recorded since our last report:—

An inquest was held by the Birmingham city coroner, on April 6, on the body of Edward Bradley (77), described as an anchor smith, who, his widow stated in evidence, drank the greater part of a bottleful of medicine in one dose. Dr. O'Connor said that he prescribed medicine for Bradley containing 2 drachms of tincture of opium in an 8-oz. bottle, the medicine to be taken every four hours. Witness was called and found that the deceased had drunk nearly all the medicine. If Bradley had been a strong man, he would have recovered. A verdict of "Death by misadventure" was recorded.

An inquest was held by the Westminster coroner, on April 6, on the body of Mr. Meyer Goodman, a theatrical agent. Evidence showed that the deceased was discovered in his bedroom at an hotel lying flat on his back, uttering terrible yells. A medical witness attributed the large quantity of iron found in the stomach to the taking of Easton's syrup tablets. Summing up, the coroner said that Mr. Goodman was found in a room in which was discovered an empty bottle of Easton's syrup tablets. No one could have any doubt that he took a large quantity of these, which would accumulate a fatal dose of strychnine. A verdict of "Suicide while of unsound mind" was recorded.

An inquest was held in the City of London, on April 10, on the body of Mr. Graeme D. Williams, a journalist, who, the evidence showed, committed suicide at a hotel by taking potassium cyanide. The deputy-coroner read a letter from Mr. Williams, in the course of which he had written:—"I firmly believe in a future life, and that a stern judgment awaits those who abandon their guard and post of life. Nevertheless, I take this course with the deliberate belief that my life is a hindrance to others, and that on balance my death is for the greatest good of the greatest number." A verdict was recorded to the effect that the deceased committed suicide while temporarily unbalanced in mind, the result of war service, domestic and financial troubles.

At an inquest held at Leicester, on April 4, on the body of Mrs. Kate Warren, it was stated that the deceased had complained of pains in the head. On April 1 she took three headache powders, at intervals, and died on the following day. The medical evidence showed that death was due to acute pulmonary tuberculosis; and the doctor was questioned by the coroner as to the effect of taking three powders within a comparatively short space of time. The witness replied that the *post-mortem* examination did not account for the sudden nature of the death, and in all probability death was accelerated by the powders. He had not analysed them, but such things usually contained aspirin or some other substance, which affected the heart. The powders were made by a reputable firm. In his opinion it was dangerous for anyone in the deceased's state of health to take such powders.

Evidence given at Surbiton, on April 10, on the body of a child named Josephine Fowler, two years of age, showed that death was due to eating tablets containing strychnine, of which, a medical witness stated, between $\frac{1}{4}$ gr. and $\frac{1}{2}$ gr. must have been taken. This, added the witness, was a fatal dose for an adult. In recording a verdict of "Accidental death," the coroner remarked that tablets containing deadly drugs could be purchased as easily as soap, though it was a difficult matter to get strychnine dispensed by a chemist unless authorised by a doctor. It was a public danger that such tablets should be extensively advertised, and he regarded strychnine in tablet form as a curse. It was of no use talking about it, however, as some people, when they read it in the Press, only laughed at the idea as being old-fashioned, but old-fashioned as it was he thought the old method of keeping deadly drugs was safer than the present-day practice of selling them to anyone without any restrictions at all.

At Newport, Mon., on April 5 and 6, William M. A. Morgan again appeared before the magistrates on a charge of murdering his mother by the administration of arsenic (*C. & D.*, April 7, p. 464). The evidence given was to a great extent a recapitulation of that previously heard in the coroner's court. Dr. Arthur, in the witness-box, stated that he had never prescribed arsenic in any of the medicines he had given the deceased. Cross-examined, witness emphatically said that he was quite certain that the prescriptions put in were exactly the same as those he gave. The sediment in one of the bottles would be caused by bismuth and magnesia. He still had some of that bismuth in stock. It had not been analysed. He had never heard of impure bismuth being on the market, but bismuth might contain a very small portion of arsenic. While he was attending Mrs. Morgan he was making up anything from twenty to forty other prescriptions daily. Re-examined, witness said that there was $\frac{1}{60}$ gr. of arsenic in each of the tablets he prescribed, and it would mean 120 tablets to obtain a fatal dose. Mr. G. Rudd Thompson, county analyst, gave evidence of finding 1.4 milligrams of arsenic in the body. "It is not the arsenic which you find in the body which is the cause of death," he said, "but the arsenic that has gone out. What remains is only proof that a very much larger quantity has been eliminated." Cross-examined, witness said that he made up a cupful of Horlick's malted milk with a heaped-up dessertspoonful of the milk and 3 gr. of the weedkiller (which contained 2 gr. of arsenic), and on tasting it he got a salty and burning taste. Dr. Cox, the county analyst's assistant, asked if the weight of the body made any difference in the calculation, replied that it would not, providing the weights of the organs were normal. His estimate was based on a nine-stone body, and he knew that Mr. Thompson had calculated on a ten-stone body. If he knew it weighed seven or eight stone it would make no difference to the amount of arsenic found. Dr. Crinks followed, and emphasised the fact that the weight of the body had nothing to do with the amount of arsenic found. Eventually the Bench decided that the evidence was insufficient, and the accused was discharged: he was subsequently committed for trial on the coroner's warrant.

Colonial and Foreign News

DUTY ON PERFUMES IN PALESTINE.—According to the provisions of Ordinance No. 3 of 1923, in future an *ad valorem* duty of 25 per cent. will be levied on all perfumes imported into Palestine. The supplementary rate introduced in 1921 is abolished.

BARIUM SULPHIDE FOR BARIUM SULPHATE.—The death of the Maharajah of Alkalkot occurred at Poona Hospital, through the administration of barium sulphide for barium sulphate. The Maharajah went to the hospital for x-ray examination of stomach trouble. It was decided to administer a barium sulphate meal. The drug was not in stock, and was ordered from a druggist's. The druggist, it is alleged, supplied barium sulphide, labelling the bottle "barium sulphate."

ASPIRIN TRADE-MARK.—The action brought by the American Druggists' Syndicate, Ltd., of Montreal, in the Exchequer Court to have the word "aspirin" expunged from the Canadian register of trade-marks, was decided at Ottawa, Ontario, on March 12. The Bayer Co., Windsor, Ont., claimed the word as a trade-mark, it having been registered in Canada in 1880 by *Farbenfabriken Von Friedrich Bayer & Co., Leverkusen, Germany*. It was assigned by them in 1913 to the Bayer Co., Inc., New York, which in 1919 assigned it to the Canadian company. The judge upheld the applicants' claim—namely, that "aspirin" was a common noun, the name of a drug, and unfitted to be used to distinguish the manufactures of one person from those of another. The judge also pointed out that the American patent on the drug had expired, and that this left the use of the word free to anyone. He ordered that it should be expunged from the register of trade-marks, with costs against the Bayer Co.

Legal Reports

Arsenical Borax Case.—At Marlborough Street Police Court, London, on April 6, Benjamin Barnato, Soho Street, W.1, was summoned for selling borax which contained sixty parts of arsenious oxide per million. The defendant pleaded "Not guilty." Mr. Rotton appeared for the Westminster City Council. Mr. Barnato said that he was a fully qualified doctor of medicine of Petrograd, and a dentist. He contended that borax was a commercial article pure and simple. The magistrate said the question was whether the sale of the borax was to the prejudice of the customer, and he decided that it was. If a person asked for borax in an oilshop he would not expect to buy it according to the British Pharmacopœia; but if he went into a chemist's shop where they did not sell large quantities he would expect to get the refined article according to the Pharmacopœia. Inspector Ratcliffe pointed out that the price of commercial borax was 8d. per lb., whereas 4 oz. was purchased at defendant's shop for 4d. The magistrate imposed a penalty of £2, adding that there was no suggestion of dishonesty on the part of the defendant.

Dispensing Tested.—At Birmingham Police Court, on April 6, A. S. Price & Co., Ltd., chemists, were summoned for having sold at 139 Bordesley Green a potassium iodide mixture containing 130 gr. of the iodide in 7½ fl. oz. in place of one containing 150 gr. in 8 fl. oz. Mr. J. F. Liverseege, F.I.C., Ph.C., city analyst, having given formal evidence of the deficiency, Mr. Walthall, defending, said the explanation was that the measure used contained a drop of water after washing. The manager of the shop said the prescription was made up from a stock mixture. The magistrates imposed a fine of 40s.—At Hampstead Police Court, on April 11, Mr. William Browne, chemist and druggist, trading as William Browne & Co., 509 Finchley Road, London, N.W.3, was summoned for having sold a mixture which, on analysis, was found to contain 10.4 gr. of potassium iodide per oz. instead of 10 gr., and 17.75 gr. of potassium bicarbonate instead of 20 gr. The medical officer of health for the borough stated in the witness-box that he regarded the deficiency in potassium bicarbonate as a material one. In answer to the chairman of the magistrates, he said that the iodide was the more important and the more expensive of the two salts. In imposing a fine of 20s., the chairman said that the case was not a bad one, or the penalty would have been more severe.—At the same court, Goddard & Grievé, Ltd., chemists, 465 Finchley Road, were similarly summoned in respect of a mixture in which the shortage in potassium iodide was given as 12 per cent. The medical officer, on oath, regarded this as a grave deficiency. A fine of £2, with £2 2s. costs, was imposed.

Salicylic Acid in Mince meat.—An appeal by Burtenshaw & Turner, Manchester, from a conviction for giving a false warranty in regard to mince meat was heard at Knutsford Quarter Sessions on April 3. The appellants were represented by Mr. T. Eastham, K.C., Mr. R. Lambert Parry, and Mr. Grace. The respondents were represented by Mr. Goodman Roberts. For the respondents, the public analyst (Mr. William Thomson), Dr. Jenner (medical officer of health for Stockport), Dr. Meredith Gray and Dr. Leech were called. These witnesses considered that 4.3 gr. of salicylic acid per lb. might be injurious to health, but Mr. Thomson admitted, in cross-examination, that he would have made no objection to 1 gr. per lb. None of the witnesses knew of a case in which harm had followed the use of salicylic acid. For the defence, Mr. E. J. Parry, B.Sc., F.I.C., F.C.S., examined by Mr. Eastham, considered that this quantity of salicylic acid was absolutely harmless; he had had experience of very many foodstuffs containing salicylic acid, and had never heard or read of a case in which harm had followed. Mr. Lincoln Sutton, examined by Mr. R. Lambert Parry, said he was public analyst for six different localities, and would never have allowed proceedings to be taken in such a case. The mince meat was absolutely pure, and 4.3 gr. of salicylic acid was harmless. Mr. Turner, manager of the appellant firm, considered he was well within the law in using this quantity

of acid, as he had read of numerous cases reported in *THE CHEMIST AND DRUGGIST* and other papers, in which 5 gr. to 8 gr. per lb. had been used, and prosecutions had been dismissed, often with costs. The Bench retired, and, apparently by a majority verdict, the appeal was dismissed, with costs.

Work on a Shaving Brush.—In the King's Bench Division of the High Court, on April 10, an action arising out of a dispute concerning work upon a patent shaving brush, which was stated to be registered as the "Hefish Shaving Brush," was heard by Mr. Justice Shearman. The plaintiff was Mr. Herbert Edwin Fish, Paxton Park, St. Neots, and the defendant Mr. J. Graaf, Sydenham Park, Croydon. Plaintiff's claim for the return of some plant, or its value (£200), had previously been disposed of, and the court was concerned only with defendant's counter-claim for £81 10s. as remuneration for work done and for damages for alleged wrongful dismissal. Mr. Graaf said that Mr. Fish employed him as a mechanic at a weekly wage of £6, and that he was dismissed without notice. Mr. Fish denied any agreement. He said that in August 1922 he was requested by defendant to permit him to undertake the experimental manufacture of the shaving brush invented by plaintiff. The brush contained an attachment whereby the soap was contained in the handle of the brush and automatically operated a lather when the brush was dipped in the water. The arrangement was that defendant should undertake the experimental manufacture with a view to his regular employment, provided he could manufacture the necessary parts cheaper than another firm. Defendant having failed to manufacture any parts, plaintiff decided not to proceed with their manufacture, and defendant acquiesced in the manufacture being discontinued. Mr. Justice Shearman said he came to the conclusion there was no definite contract of employment, and Mr. Graaf's claim for a weekly salary failed. As regarded expenses, Mr. Graaf had been amply compensated. Judgment for the plaintiff with costs.

Income-tax Frauds.—At Liverpool Assizes, on April 11, Thomas Lewis, retired chemist, Blackpool, was charged with forgery of income-tax repayment claims and money orders, obtaining money orders by false pretences, and perjury (*C. & D.*, March 3, p. 293). Mr. Wingate Saul, K.C., and Mr. Jordan appeared for the defendant, who pleaded "Guilty." The statement for the prosecution was a recapitulation of that given in the lower court, with the addition that the defendant's income was just under £1,000 a year. Mr. Wingate Saul, in an appeal for leniency, said the genesis of these offences seemed to lie in a superstition prevalent in certain parts of the country—and one which seemed to be very strongly held by the accused—that if one made a will it would soon afterwards become effective—in other words, the testator would die. In 1910 Lewis's wife left him and went to America, where she had since resided with another man. Lewis made up his mind that his wife should not benefit in any way on his death, but the difficulty was how to effect his purpose without making a will. It was then he conceived the idea of investing some of his money in the names of relatives whom he wished to benefit on his death. These relatives were not mythical people. Counsel added that, as the £647 had been repaid, the country had lost nothing. Evidence was given as to Lewis's previous exemplary character. The judge, in passing sentence, said Lewis had pleaded guilty to a series of wicked and mean frauds upon the Inland Revenue. His lordship could not accept in its entirety the excuse that the matter was in its origin innocent and merely with the object of making a disposition of the accused's property without making a will. Lewis could have put his property out of the reach of his wife and yet have continued to bear his due proportion of the public burdens of the country. He had cheated the country of £647, and but for the respectable life he had led prior to this and the fact that he had done something towards restitution, the sentence would have been heavier. He was fined £100, sentenced to eighteen months' imprisonment in the second division, and ordered to pay the costs of the prosecution.

Trade-mark Appeal.—In the Chancery Division of the High Court, on April 10, Mr. Justice Eve was asked by Taylors' Drug Co., Ltd., Burley Hill, Leeds, to reverse a decision of the Registrar of Trade-marks refusing to register the word "Germoceca" for skin ointments. The application was opposed by Lady Mary Veno and the Veno Drug Co., Ltd., owners of the trade-mark "Germolene," who were represented by Sir Duncan Kerly, K.C., and Mr. Moritz. Mr. Hunter Gray, K.C., and Mr. Sebastian appeared for the applicants. Mr. Gray said the Registrar had decided the matter upon a principle which, although counsel did not say it was wrong, had never been decided in any previous case. Both the words "Germolene" and "Germoceca" were applied to ointments, and the Registrar had held that although there could be no confusion between the two words there was a third word "Homocaea," and that, as the applicants' word appeared to have been obtained by taking the "germ" from Germolene and the "oceca" from Homocaea, some confusion would arise. The owners of the word "Homocaea" did not oppose the application for registration, but they had made a declaration to the effect that they would have opposed it had they known of it. Counsel said he knew of no case in which the opponents relied for the purpose of opposition on another trade-mark. He should have submitted that the word "Germoceca" was a distinctive word which could not be confused either with Germolene or Homocaea. Applicants were entitled to take any two parts of someone else's trade-marks if they made a new combination. Sir Duncan Kerly said that Germolene was very well known, and had been enormously advertised: that was why Messrs. Taylor wanted to get their word registered. He submitted that the Registrar had arrived at a sensible decision upon the matter, and that there was such a possibility of confusion arising between the two words that the risk ought not to be taken. Messrs. Taylor were perfectly familiar with Germolene and Homocaea, and were selling both goods; but they were not entitled to sail near the wind with the intention of getting the benefit of the advertisements of either of these goods. Mr. Gray contended that there was no such intention on the part of the applicants. His lordship said he would consider his judgment.

Arsenical Contamination from Glass.—At Birmingham Police Court, on April 6, Boots Cash Chemists (Western), Ltd., were summoned for having sold at 275 Coventry Road, Small Heath, potassium carbonate which contained eighty parts of lead per million and "about" ten parts of arsenic per million. The city analyst (Mr. J. F. Liverseege, F.I.C., Ph.C.) stated in the witness-box that the article sold was impure commercial salt of tartar instead of British Pharmacopœia potassium carbonate. The lead was about sixteen times as great and the arsenic five times as great as the limit laid down. The price of the pure drug was charged for the impure article, and therefore the sale was to the prejudice of the purchaser. Cross-examined by Mr. Bramall (London), Mr. Liverseege said he did not think it probable that the arsenic and lead were absorbed from the glass bottle, as the substance was dry. Addressing the Court for the defence, Mr. Bramall said that it was childish to suggest that the proportion of arsenic found would have the slightest effect upon anyone. The article in question was used for a hair wash. It left Nottingham purer than required by the British Pharmacopœia. The only conclusion was that the lead and arsenic were derived from the bottle. As a consequence of that discovery, every similar bottle had been withdrawn from the company's 600 shops, and new bottles of clouded glass, which contained neither lead nor arsenic, substituted. In any case of a conviction it would have to be proved that the sale of the potassium carbonate was to the prejudice of the purchaser. Mr. Henry Droop Richmond, F.I.C., chief analyst to Boots Pure Drug Co., giving evidence, said that his belief had been the same as that of Mr. Liverseege regarding the absorption of lead and arsenic from an apparently dry substance; but, having verified the correctness of the analyst's certificate in the case, he made investigation to ascertain the cause of the

impurity. The result was that he found the potassium carbonate, which was a hygroscopic substance, had derived the lead and arsenic from the glass. He had discovered this by breaking the bottle containing the article complained of and analysing the pieces of glass. Since then he had placed potassium carbonate in a similar bottle, and had found that after fourteen days less than five parts of arsenic per million had increased to fifteen parts. The Bench had no hesitation in dismissing the case, the chairman saying he believed that Mr. Richmond's discovery would make history to some extent.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office

NUTRIMENT, LTD. (P.C.).—Capital £5,000. Objects: To acquire certain patents from D. Thomson relating to a process for the extraction of proteids and lactose from whey, etc. Solicitors: Simmons & Simmons, 13 Finch Lane, London, E.C.

OSOBRITE, LTD. (P.C.).—Capital £5,000. Objects: To carry on the business of manufacturers of and dealers in polishes of all kinds, including metal and plate, stove and grate, furniture and boot polishes, etc. R.O.: Cambridge Grove, Wilbury Road, Hove.

T. COLLINS, LTD. (P.C.).—Capital, £500. Objects: To carry on the business of chemists, druggists and photographic dealers, etc. The first directors are T. and Mrs. E. Collins, 192 Windmill Lane, Smethwick. R.O.: 192 Windmill Lane, Smethwick.

PEREMOL, LTD. (P.C.).—Capital £500. Objects: To carry on the business of manufacturers of and dealers in soap and toilet preparations and chemical and medicinal specialties, etc. The first directors are: J. Haycock, Great Glen, nr. Leicester, chemist; and H. Jenley.

MARSHALL, LECONTE & Co., LTD. (P.C.).—Capital, £1,000. Objects: To carry on the business of chemists, druggists, drysalter, oil and colourmen, leather merchants and manufacturers, leather dressers, tanners, etc. R.O.: 14 South Street, Finsbury Pavement, London, E.C.

GOODWYNNE, LTD. (P.C.).—Capital, £4,000. Objects: To carry on the business of manufacturers of and dealers in chemicals, drugs, dyes, agricultural fertilisers, oils, paints and varnishes, soap, etc. The first directors are: P. J. Goodchild and H. C. Wynne. R.O.: 12 Tokenhouse Square, London, E.C.1.

PITSEA GRIT AND SHELL CO. (1923), LTD. (P.C.).—Capital, £1,000. Objects: To carry on the business of grinders of flint and shell, makers of and dealers in fertilisers, poultry and other live-stock foods, chemists, chemical manufacturers, etc. R.O.: Oxford House, 9-15 Oxford Street, London, W.1.

BOOTH'S (BOOTLE), LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of manufacturers and workers of and dealers in manure, fertilisers, chemicals and materials, etc., incidental to the agricultural industry. The first directors are: F. Llewellyn, A. Booth, and J. Spence. R.O.: The Temple, 24 Dale Street, Liverpool.

REMEDIES, LTD. (P.C.).—Capital, £500. Objects: To carry on the business of manufacturers of and dealers in medicinal preparations, chemical manufacturers and dealers, drysalter, manufacturers of and dealers in mineral waters, wines, cordials, liqueurs, soups, broths and other restoratives or food, etc. R.O.: 32 Welford Road, Leicester.

AMETHYST PRODUCTS, LTD. (P.C.).—Capital, £500. Objects: To acquire from A. W. J. Plummer the trade-mark and rights of the preparation known as "Amethyst Dry Shampoo," to manufacture and sell the same, and to carry on the business of manufacturers of all kinds of toilet preparations, etc. The first directors are:—A. W. J. Plummer, "Inveresk," New Road, Croxley Green, and A. B. Malden, 37 Streatley Road, Brondesbury. R.O.: 4 Regent Street, London, S.W.1.

HUTCHINSON'S, LTD. (P.C.).—Capital, £6,000. Objects: To carry on the business of manufacturers, importers and exporters of and dealers in all kinds of toilet, household, laundry and other soaps, toilet, emollient, medicinal and other compounds, face creams, etc. O. G. Hutchinson, 68 Curzon Street, Mayfair, W.1, is permanent managing director.

UNITED IMPORTS, LTD. (P.C.).—Capital, £10,000. Objects: To carry on the business of importers and exporters of and dealers in dyestuffs and chemicals, etc. The directors are: W. J. Holland, 26 East Parade, Bradford; A. Connell, 20 Bevis Marks, London, E.C. 3; and J. H. Duke, 9 Hope Street, Piccadilly, Manchester. Solicitors: Coburn & Co., 6 Drapers Gardens, E.C. 2.

ADELPHI DEVELOPING Co., LTD. (P.C.).—Capital £100. Objects: To carry on the business of photographic developers, printers and enlargers, dealers in photographic supplies, etc. The first directors are:—W. P. Connolly, 134 Alderson Road, Wavertree, Liverpool, and W. H. Thomason, 10 Cornwall Street, Runcorn, Cheshire, chemist and druggist. R.O.: 1 Mount Pleasant, Liverpool.

IDEAL UTILITIES, LTD. (P.C.).—Capital £2,500. Objects: To carry on the business of manufacturers, merchants or agents of toilet, bath and massage specialities, patent medicines, perfumery and general bath or toilet requisites, shippers, importers, exporters and factors of, dealers and traders in and agents for British, foreign and Colonial goods and wares, etc. Solicitor: H. W. Shaw, 61 Carey Street, London, W.C.

SENTINEL OILS, LTD. (P.C.).—Capital, £2,000. Objects: To carry on the business of oil producers and merchants, dealers in petroleum and other oils and products thereof; and any gaseous carburets, or hydrogen, naphtha, greases, waxes, gases, minerals and chemical substances, petrol, benzine, asphalt, etc. The first directors are:—J. Campbell and F. R. Fellows. R.O.: 47 Essex Street, Strand, London, W.C.2.

"D AND L" MANUFACTURING Co., LTD. (P.C.).—Capital, £300. Objects: To take over the business of chemical manufacturers, carried on by A. E. Duce and H. Lott at 68A Western Road, Plaistow, as the "D and L" Manufacturing Co., and to carry on the same and the business of haulage contractors and timber merchants, etc. The permanent directors are A. E. Duce, H. Lott, and A. Sceats. R.O.: 68A Western Road, Plaistow.

THE SACCHARIN Co., LTD.—At a meeting held in London on March 19 it was resolved that this company be wound up voluntarily as a preparatory to reconstruction. Mr. C. J. Ford, 72 Oxford Street, London, W., was appointed liquidator.

LEVER BROTHERS, LTD.—The directors' report for 1922 shows a credit balance of £4,625,018, compared with £4,035,516 for the previous year. The dividend on the ordinary shares is unchanged at 10 per cent.; £250,000 is again placed to reserve, and the balance carried forward is £55,371, against £54,127.

POLISH BANK FOR LONDON.—A London branch of the Union Bank of Warsaw will be opened on or about April 16 at 11-12 Blomfield Street, E.C.2. The bank, the head office of which is in Warsaw, was established in 1921. It has branches at Lodz and Danzig, as well as three branch offices in Warsaw.

HENRY LAMPLOUGH, LTD.—The business and premises of this company are to be offered for sale by auction, at the Mart, London, on April 24. It is stated that one lot comprises "the sole use of the recipe, all the beneficial interest, goodwill, trade-marks, and rights of Henry Lamplough's famous Pyretic Saline." There is a further statement to the effect that the trading accounts and net profits for the past fourteen years will be disclosed to bona-fide intending purchasers on request prior to the auction if the vendors in their absolute discretion deem fit. It will be open also to a buyer of the beneficial interest and goodwill to take the leasehold shop and warehouse premises, 58 Blackfriars Road, while a separate lot

consists of 113 Holborn, freehold shop and office premises, with vacant possession.

ALABONE & Co., LTD.—A meeting of the creditors of Alabone & Co., Ltd., Evesham, took place at the offices of the Official Receiver at Worcester on March 27. When the company's affairs were last considered the Official Receiver stated that further inquiry seemed to be desirable as to the conduct of the business. The company was registered in 1921, the object for which it was incorporated being to carry on the business of horticultural and agricultural chemists and wine and spirit merchants. When the question of the appointment of a liquidator was raised, Mr. Saunders, who appeared for Mr. J. W. Daniels, chemist, said that the affairs of the company were such that a searching inquiry should be made. The Official Receiver said he understood that Mr. Alabone was willing to agree to pay the debts by instalments, and at present he could offer £3 per week. This was a matter for the trustee and the committee to consider. The creditors agreed to the appointment of Mr. G. W. Bull as liquidator, with a committee of inspection. There was not a quorum of the contributories present or represented to pass a resolution.

JOINT COUNCIL OF QUALIFIED OPTICIANS (the word "limited" is omitted from the title by licence of the Board of Trade).—Limited by guarantee, without share capital. Objects: To purchase or lease, erect and maintain one or more convalescent homes in the United Kingdom for the reception of convalescent patients; to acquire medical, surgical, optical and other appliances, either by purchase, gift or otherwise, and to dispose thereof either gratuitously or at a price not exceeding the usual retail price for the time being of such appliances; to give or procure qualified optical treatment or advice of any kind, either gratuitously or not, to persons ordinarily residing within the United Kingdom, the Isle of Man and the Channel Islands, provided that no work is undertaken which is not commonly undertaken by qualified opticians; to keep a register of all ophthalmic opticians. The management is vested in an executive of not less than eight nor more than 14 members. Until the ordinary general meeting in 1923 the subscribers to the memorandum of association shall constitute the executive. Thenceforth the council of the British Optical Association and the council of the Institute of Ophthalmic Opticians shall each be entitled to be represented on the executive by four members, who in the case of the Institute of Ophthalmic Opticians shall be members holding the diploma of the Worshipful Company of Spectacle Makers. The first members of the executive are: O. Aves, W. B. Barker, F. W. Bateman, S. Cowan, F. W. Dadd, F. G. Huntly, G. E. Houghton, and H. L. Truscott.

R. WHITE & SONS, LTD.—The annual meeting was held on April 6 at Cannon Street Hotel, London, E.C., when the chairman (Mr. J. G. Colmer), in the course of his speech, said that the experience of the mineral water trade since the introduction of the tax has been a disastrous one, and it bore very heavily on their own business, which is largely among the working classes. For the first full year of the working of the mineral water tax—that is, 1917—the company paid the sum of £150,315, and in 1918 the sum of £205,000. Last year, when business was not so good, the sum paid was £59,574, and altogether, in nearly seven years, the company had paid £828,781 in connection with the tax. Production costs cannot be materially reduced while the present taxation remains in force, and the chairman gave some idea of the difficult conditions under which the company has to work. Recently the price of their chief raw material—sugar—fluctuated very much. On January 5 it was 50s. 6d. per cwt., and on February 13 it was 56s. 9d. per cwt., while to-day's price is 61s. 3d. per cwt. Just a few more particulars on the question of taxation. In 1913 the duty on sugar was 1s. 10d. per cwt., and on saccharin 9s. 4d. per lb. In 1922 the figures were 25s. 8d. and 110s. respectively—fourteen times greater in the case of sugar and nearly twelve times greater for saccharin. In 1913 the total taxation paid by R. White & Sons, Ltd., on mineral waters was roughly £7,392; in 1917 it was £256,000; and in 1922 it was £110,747.

Bankruptcy Reports

Re Theophilus Morgan Davis, 6 St. Martin's Street, London, W.C. (*C. & D.*, January 20, p. 79). The public examination took place on March 22. It appeared that in or about the year 1894 the debtor, with £35 capital, commenced business as a chemist at 121 Lewisham High Road, S.E., and in October 1913 he transferred the business to another person; he was then employed as manager until March 1919, from which time until the date of the receiving order he was director and secretary to a private limited company. He attributed his insolvency to loss incurred in connection with the proposed purchase of an artificial fertiliser, and to being held liable in an action brought against him for payment of certain commission. In regard to the proposed purchase of an artificial fertiliser, debtor signed documents which entitled him to have an option on certain mines for six months. He put up £2,000 in connection with the scheme, but then found it impossible to raise further capital. He did not consider this was a speculation outside his ordinary business of a chemist, and believed that if he could have raised sufficient capital the proposition would have turned out well. The examination was concluded.

Re Clement Harrison, late 9 Coleherne Terrace, Earl's Court, London, S.W., chemist.—The first meeting of the creditors was held at Bankruptcy Buildings, W.C., on March 14. Mr. F. Vyvyan, Official Receiver, said the debtor was in business on his own account for about five and a half years prior to June 1919 at 22a High Street, Putney, when he sold the business for £2,000. Early in 1920 he took a shop at 37 Woodcote Road, Wallington. After a fortnight he was taken ill, and had to place the shop under management for some time. He then resumed charge, and sold the business towards the end of 1920 as a going concern for £1,125, out of which he discharged all liabilities with the exception of an overdraft to his bankers. On October 25, 1921, debtor commenced a chemist's business at 9 Coleherne Terrace, but owing to insufficient capital he had to borrow £250. The business increased its turnover, but had not allowed a sufficient margin to repay the loan, and in consequence judgment was obtained against him and execution levied in January last. He estimated his liabilities at £1,300, and his assets were valued at £225. Mr. A. Granville White, accountant, 14 Old Jewry Chambers, E.C., was appointed trustee, assisted by a committee of inspection.

Re Edward Cranston, now or lately trading as Sangleys Drug Stores, 314 Sangley Road, Catford; chemist. The first meeting of the creditors was held recently. The statement of affairs showed liabilities of £325 17s. 2d., against net assets of £846 3s. 8d. It appeared that in 1903 the debtor commenced business as a chemist at 236 Hither Green Lane, with £1,500 capital. In 1904 he opened a branch business at 115 Torridon Road, Catford, at a cost of about £400. In 1906 he closed the Hither Green business and opened the business at 314 Sangley Road. Early in 1922 creditors began to press for payment; his wife's furniture was sold for £40, and later, with a view of raising money to pay his liabilities, he advertised for a partner. As a result, a gentleman came to him in or about September 1922, and offered to arrange a settlement with his creditors. He handed the lease of the Sangley Road premises to him, and offered a composition of 7s. 6d. in the £. In November 1922, the debtor executed a deed of assignment (*C. & D.*, II., 1922, p. 824), but some creditors refused to assent. The debtor attributed his present position to ill health, expenses of illness of his wife, and heavy working expenses. The Official Receiver said that an offer of £750 had been received for the business, since increased to £785, conditionally upon the trustee under a deed of assignment being able to obtain an extension of the lease, and conditional also upon the value of the stock working out at £250. Another offer of £600 had been received for the business, fixtures and remaining few years of the lease and the stock at valuation. The creditors decided to appoint Mr. Parkin S. Booth, Holborn Viaduct, E.C., as trustee, while a committee of inspection was also nominated.

The public examination was commenced at Greenwich on March 20, when the debtor stated that a gentleman came forward who offered to pay his debts in full, and debtor agreed to leave his affairs in his hands. Debtor further stated that he found the man was offering his creditors 7s. 6d. in the £, and debtor went to his principal creditors and told them it was not a *bona fide* offer, and that he was prepared to pay his liabilities in full. The examination was adjourned.

Re Thomas James Galt, chemist and optician, 25 Railway Road, King's Lynn. A meeting of the creditors was held at the Official Receiver's office, Norwich, on April 4. Gross liabilities were returned at £1,760 2s. 4d., of which £1,751 5s. 8d. is expected to rank. The deficiency is £1,600 13s. 5d. Slowness of trade is alleged as the cause of failure. The Official Receiver's observations are that the proceedings were instituted by debtor on his own petition, consequent upon an execution having been levied at the suit of a creditor for £31. Debtor was formerly in business as a chemist at Blackheath, and remained there until April 1904. All his liabilities were then paid, but he had to dispose of a reversionary interest under his father's will. He removed to King's Lynn and took the present business. He had about £50 at the time, but the stock, etc., was purchased for him by his father-in-law for £30. He had kept only a day-book and a customer's ledger. He had known of his insolvency for some years, but had not contracted debts which were now owing other than with his original creditors. The household furniture belonged to his wife. The unsecured claims include five for borrowed sums amounting to £1,645, of which £1,170 11s. is stated to be due to his wife, but it is expected that this claim will prove to be a postponed one. The balance appeared to be ordinary trade accounts. The winding up was left in the hands of the Official Receiver. The following are among the creditors:—Wyleys, Ltd., £28; Evans Sons Lescher & Webb, Ltd., £26; International Chemical Co., Ltd., £14; Cuxson, Gerrard & Co., Ltd., £23; Thos. Kerfoot & Co., Ltd., £13; J. Grossmith & Sons, Ltd., £10.

Re William Harold Thorne, 18 Beaconsfield Road, St. Albans, chemist.—The first meeting of the creditors was held recently at 29 Russell Square, London, W.C. The statement of affairs showed liabilities of £1 351 0s. 8d., and assets of £16. Debtor attributes his failure to losses in the betting business, depression in trade, and less on the sale of his chemist's business. It appeared that he purchased the lease, goodwill, stock and fixtures of a chemist's business at 3 Pelham Street, South Kensington, for £2,750. He paid £2,200, leaving a balance of £550 owing. Later he considered that he had given too much for the business, but carried on until the end of September 1922, when he sold it for £1,650. The case was left in the hands of the Official Receiver as trustee of the estate. The public examination took place on March 21. It was stated by the debtor that, prior to March 1921, he was employed by Messrs. Willcox as a chemist's assistant at £9 a week. He then gave up his employment, and entered into partnership with a man named Stevens in turf commission agent's business, into which he put £800 and came out with £100. The business was entirely unsuccessful. Before purchasing the business at South Kensington, an accountant from St. Albans went through the books, and he thought there was a good business to be done. Debtor said he thought there was about £800 a year in it. During the nine months he was there the business fell, until he was taking £40 a week, whereas it should have been £60. He did not suggest that the takings had been misrepresented by the previous owner. The Assistant Official Receiver suggested that the gross profits on drugs was from 50 to 75 per cent., but the debtor said that on patents it was about 25 per cent., and on medicines it was more. He thought his average profits were 33 per cent. His expenses were £150 per annum rent, £60 taxes, £4 per week for an assistant, £1 for a girl assistant, and 14s. for a boy. The examination was adjourned, debtor being ordered to furnish an account. The following are among the creditors:—Butler & Crispe, £130; Yardley & Co., Ltd., £10; Kolynos, Ltd., £10; Evans Sons Lescher & Webb, Ltd., £15.

Practical Notes and Formulas

Temperatures under this heading are on the Centigrade Scale

CHLORETONE IN OILY SOLUTION

In some conditions of the mucous membrane of the nose or throat the following combination appears to be useful:

| | | | |
|-------------------|-----|-----|---------|
| Chloretone | ... | ... | 15 gr. |
| Camphor | ... | ... | 5 gr. |
| Menthol | ... | ... | 3 gr. |
| Oil of eucalyptus | ... | ... | 15 min. |
| Liquid paraffin | ... | ... | ad 3i. |

The chloretone is dissolved in the liquid paraffin by heat in a water bath.

POTASSIUM IODIDE OINTMENT.

The following formula has been given (J.A.Ph.A.) as possessing a number of advantages over some official formulas. The glycerin should be used for two reasons: first as a preservative, and secondly as a solvent for the potassium iodide and sodium thiosulphate. It is superior to water, being non-volatile and hygroscopic, and this in turn prevents the ointment from becoming granular:—

| | | | |
|---------------------|-----|-----|--------|
| Potassium iodide | ... | ... | 10 gm. |
| Sodium thiosulphate | ... | ... | 1 gm. |
| Glycerin | ... | ... | 9 gm. |
| Benzoated lard | ... | ... | 80 gm. |

The two salts are dissolved in the glycerin and incorporated with the lard in the usual way.

TOOTH CLEANSING AND POLISHING

Dr. Henry Kraemer, in a paper read before the Chicago branch of the American Pharmaceutical Association ("Journal of the American Pharmaceutical Association," i. 1922), gave the following as the best two tooth powders:

Blair's Formula

| | | |
|-------------------|----|----------|
| Strontium oxide | .. | 20 parts |
| Calcium carbonate | .. | 76 parts |
| Soap | .. | 3 parts |
| Catechu | .. | 1 part |

Flavour, a sufficiency.
Dissolve the soap in about 4 parts of water and mix intimately with about 25 parts of precipitated chalk, and dry at moderate heat. Dissolve the catechu in 5 parts of alcohol and intimately mix with 25 parts of precipitated chalk; mix equal parts of oil of wintergreen and oil of sassafras with the remaining 25 parts of pre-

cipitated chalk, using about 6 drops of the mixed oils for each 100 grams of the powder. Mix the three portions and sift through a bolting cloth. Follow about the same procedure for preparing Jungman's Powder, except that the catechu is omitted and the oils should first be intimately mixed with the sugar.

Jungman's Formula

| | | |
|--------------------|----|----------|
| Tin oxide | .. | 15 parts |
| Precipitated chalk | .. | 60 parts |
| Soap | .. | 4 parts |
| Sugar | .. | 5 parts |

Flavour, a sufficiency.

DIAGNOSING DISEASES IN DOGS

It is a common occurrence for dogs, "especially after being at a Show," to take tremblings and shiverings, with a staring coat, haggard appearance, blood-shot eyes, running of the nose, and perhaps a cough. These animals ought to be isolated and the temperature taken. A high temperature indicates such complaints as pneumonia, pleurisy, enteritis and peritonitis, and liver disease. The first may be suspected when the breathing is rapid and difficult; the second by the loose condition of the bowels, pain in manipulating the belly, and, usually, vomiting, the third from the yellow tinge of the eyes, lips, and other exposed parts. There are other diseases, such as influenza and distemper, but the same high temperature is not present as in the complaints mentioned. To distinguish influenza from distemper is not easily accomplished in the early stages, but the latter may be more strongly suspected in animals ranging from three to eighteen months old, and, as a rule, a dog does not take distemper twice. It is not generally advisable to give medicine, unless there are signs of heart failure, intense pain or cough, until a definite diagnosis is made.

TABLETS OF CHLORAMINE—T.

W. V. Kopfstein ("American Journal of Pharmacy," 1923, 101) gives data necessary for overcoming difficulties in making compressed tablets of chloramine—T. This substance, in dry crystalline form, has a purity of 96 to 98 per cent., water content being 18 to 20 per cent., and chlorine content 12.25 to 13.0 per cent. The stability of

the product is dependent upon purity, but the above product is stable, both dry and in aqueous solution. The salt is compatible with sodium chloride, sodium bicarbonate, sodium carbonate, soluble starch, sodium and potassium tartrate, sodium borate, zinc stearate, soluble saccharin, and talc. Incompatibles are: All acid fumes or chemicals of acid nature, ammonia fumes, glycerin, sodium citrate, acid boric, sugar, ammonium chloride, insoluble saccharin, soluble soap, and alcohol. Chloramine—T is well placed in the "delicate" group of products in tablet manufacture. Contamination from any source must be avoided, and drying temperature must not exceed 100°. The substance must not be brought into contact with metals in moist state. Granulation is not necessary if flake crystals are used. In exceptional cases where lubricant is needed, neutral petroleum oil may be used. Any tendency of tablets to turn yellow is sure sign of decomposition. Enclosure in dry gelatin capsules is suggested as the ideal method of marketing.

VEGETABLE INSECTICIDES

As is well known, commercial insecticides are prepared from finely powdered flowers of pyrethrum, but for long no attempt was made to investigate the active principles of insect powder. A Japanese scientist, Yamamoto, was the first to isolate this active principle, to which he gave the name of "pyrethron." The latter is extremely volatile, a fact which explains the loss of action of the powder on keeping. In Switzerland, pyrethrum has of recent years been extensively planted in the vineyards, where each wine-grower produces by this means the amount of insecticide he needs for treating his vines. Further attempts to devise an active and stable form in which the insecticide could be used led to the preparation of a pyrethrum soap. However, it was found that the alkali present in the soap saponifies the pyrethron, and impairs its efficiency. Chemists of Lyons improved this procedure by substituting for the soap a sulphonated oil, only 5 kilos. of which is required for 100 litres of water, in place of the 10 kilos. of pyrethrum soap required by the Swiss wine-growers. But the use of pyrethrum as an insecticide is expensive, hence it became imperative to discover a more economical insecticide. Yamamoto's discovery induced the brothers Gattefossé, well known in South-eastern France for their valuable research work on lavender, to investigate the vegetable esters capable of destroying insect pests as effectively as insect powder. They succeeded in establishing that a large number of plant esters possess marked insecticidal properties, including lavender, which at present is cheaper than insect powder. They found that a mixture containing 100 grams of lavender oil and 5 kilos. of soft soap in 100 litres of water killed cochylis and endemias. Oil of spike, as well as thyme, serpyllum, and, indeed, all essential oils of mountain plants, yield practically the same result. Following these investigations, a sulphonated oil containing various essential oils and oleoresins obtained from French aromatic plants possessing acknowledged insecticidal properties has been prepared at a low cost. This result is of particular interest, since it affords another use for French lavender and at the same time supplies a harmless and effective means of combating insect pests.—*Jean de Lorques.*

A CURE FOR HICCOUGH.—"Take a tumbler and fill it about half-full of water, put your lips to the opposite side of the rim to what you ordinarily would in drinking, tilt the glass away from you instead of towards you, and so sip the water. . . . You will be a healed, a quiet, a restful man."—"Humours of a parish and other quaintnesses.")

AURA PRO NOBIS!—"Perfumes to match your aura" can be obtained in New York, where an aura scent provider makes creams, powders, rouge, bath salts, etc., with the perfume that makes one's aura evident. The cost is \$500 per annum. "The interview takes place in a darkened room, and Madame goes into a sort of sleep, in which your aura floats about her, suggesting colours and perfumes until she evolves what she requires, whereupon your little aura goes back into obscurity."—"Daily Express."

Insulin

THE many inquirers as to a source of supply of insulin will be glad to learn that this substance is being manufactured in London by The British Drug Houses, Ltd., in conjunction with Allen & Hanbury's, Ltd. As has been stated before, the patents for the manufacture are controlled in this country by the Medical Research Council, but this body does not undertake the manufacture. The British Drug Houses, Ltd., who undertook the work, have erected and equipped a special laboratory involving a large outlay of capital. The building was erected in record time, and in the meantime the chemists were tackling the technical difficulties of manufacture. It is one problem to make a few grains of insulin on the experimental scale, and another to translate this into a comparatively large scale operation and obtain the maximum yield of product. Although the outline of the manufacturing process has been told in the *C. & D.*, we had not altogether realised the unusual features involved in separating insulin from the pancreas. These details were explained to us on a visit this week to The British Drug Houses, Ltd., where the first British supplies are available, thousands of doses having been already produced. Production is increasing week by week, but owing to the large demand anticipated, it is likely that the quantity available at present will not suffice to meet all requirements, and therefore preference will have to be given for the present to supplying hospitals and medical men possessing facilities for pathological testing. The distribution of insulin is subject to the direction of the Medical Research Council, a condition of affairs which is temporary and will be modified so soon as the initial demand has been satisfied. The insulin produced is in a purified form, and from this Allen & Hanbury's, Ltd., prepare and pack the sterile solution employed as an injection. The product is issued under the joint names of the two companies, as "A.B." brand. Asked regarding the price of the product, Mr. Charles A. Hill, managing director of the British Drug Houses, Ltd., informed us that this is approximately 2s. 6d. per dose, a price which compares favourably with that charged in the United States. It is a tribute to the resources of the British fine chemical industry that insulin has been produced so quickly of such high purity and activity. The last-named quality is of the greatest importance as insulin is readily injured by contact with the other ferments of the pancreas, and is particularly sensitive to high temperatures.

In an article, entitled "Insulin and Diabetes" (*"Lancet,"* April 7, p. 715), Dr. H. E. Moore reviews the present position of this new therapeutic agent. Insulin, the author states, is apparently not a protein, it may be heated on a boiling water bath for ten minutes in a faintly acid solution, without appreciable reduction in strength, but actual boiling destroys it in three minutes. It occurs as a white powder, soluble in water and in alcohol; the aqueous solution is laevorotatory. Improvements in the method of production now makes it possible to extract about 200 to 400 rabbit units of insulin from 5,000 grams of beef pancreas, and the product is at present being supplied in the United States at about 3d. per rabbit unit. In view of the fact that anything from 6 to 50 rabbit units have to be injected subcutaneously or intravenously a day, while some coma cases may require 150 units within twelve hours, it is evident that the high cost of the product will prove a serious obstacle to its general use. However, medical opinion is agreed, states Dr. Moore, that insulin-treatment of diabetes mellitus will not replace the dietetic treatment, and probably it will not be required at all in the less severe cases. On the other hand, it will certainly prove a valuable adjunct to our present method of treating diabetes in the severe, the juvenile, and coma cases, as well as those complicated by severe acidosis, infection and gangrene. The author questions whether insulin should be used at all except by those who can regulate its use by blood-sugar estimations, in view of the danger of hypoglycæmia. An observation recently made by Macleod may have an important bearing on the future of insulin, by providing a cheaper and more readily available source of supply than the bovine pancreas. This investigator found that extremely

potent insulin preparations could be made from the principal islets of two readily available fish, *i.e.*, the angler (*Lophius piscatorius*) and the sculpin (*Myoxocephalus octodecimspinosus* and *scorpin*). In one experiment 0.68 gram of dried islet tissue of the sculpin yielded more than twelve rabbit units of insulin. However, in spite of these experimental successes, it remains to be seen whether these teleostean fishes can be used for its production on a large scale.

Physicians' Press Propaganda

ALTHOUGH, so far as we are aware, the *C. & D.* pamphlet outlined in 1918 (*C. & D.*, 1918, p. 814) was the first application of the principle of reasoned propaganda to the drug-trade, superior persons who are disposed to frown on propaganda of any sort may be interested to learn that there is precedent in exalted quarters for the suggestion. Readers of Wootton's "Chronicles of Pharmacy" will remember that the author made what is known as the Rose case the culminating point of a skilfully marshalled narrative of the long-drawn conflict between physicians and apothecaries in the late seventeenth and early eighteenth centuries. But the decision of the House of Lords, in 1703, in favour of the apothecaries was by no means the end of the struggle in its general aspects. More than one physician entered the fray with pamphlets of substantial size (one of them ran into three editions), and an anonymous apothecary retorted in 1704 with "Tentamen Medicinale," which evoked a reply, also anonymous, in the following year. Of greater interest to pharmacists, however, in view of the doings of the "brigade" to which public attention has lately been called, is the fact that in 1707 the controversy found its way into the newspapers, and—a detail still more to the purpose—into their advertisement columns. On April 12 of that year the advertisements in "A Review of the State of the British Nation," included a warning, signed by the President and Censors of the Royal College of Physicians of London, beginning as follows:—

"Whereas divers Persons do illegally practice Physick about this City of London, in Defiance of the known Statutes of this Realm, and have been, and are greatly countenanced and encourag'd in their under Practices by some Members of the College; who, by concurring and joining with them, in Consultation about the Sick, . . ."

As there were other means of notifying members of the College, it may fairly be inferred that the threat was issued largely by way of propaganda. Confirmation is lent to this view by an advertisement appearing in the same paper (which was published three times a week) on June 7, less than two months later. As to the purpose of this there cannot well be any doubt. Occupying a page paper (which was published three times a week) on beginning cleverly with some platitudes about the Act of Union with Scotland, then lately passed—1723 has apparently nothing to teach 1707 in the art of writing this kind of advertisement—it includes the following passages:—

" . . . You do not consult your Reason, when you expose your Life to the innumerable Pretenders of the Shops of Medicines, who were never examin'd and approv'd, who have no Learning, nor Skill in the most difficult and hazardous Affair in the World, . . . Are ye not able to penetrate into the ridiculous and deadly Consequences of the Apothecaries paying themselves by the Numbers and the Rates of the Doses, 50 times above the real Value? Cannot you discern, that the vast Expence of all or more than you can spare, enslaves you to the Apothecaries, till the horrid Affright of Danger compells you to send for a Physician? . . . When the Apothecaries (separate from the Grocers) increas'd excessively, many wicked sottish Physicians sent them to visit their Patients, and report the Operations of the Medicines. How! will they not give you a Farthing for your Visits, you shall be paid out of the many little Doses, we will mix Conserves and Syrups with all the Confections and Powders, and mix many Pills together, and blind them from the Knowledge of the Prices, and you may have for each Bole, not worth one Penny, 2s. 6d. . . ."

So far as is known, the apothecaries made no reply in the Press. One of the quaintest features of this diatribe is that it is put into the mouth of an anonymous gentleman from Scotland. No one in 1923 seems to have thought of that.

Corner for Students

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed "Corner for Students," *The Chemist & Druggist*, 42 Cannon St., London, E.C.4.

Report on the March Analytical Exercise

THE powder distributed to students on March 13 contained sixty-five parts by weight of dry sodium carbonate, five parts of disodium hydrogen phosphate, and two parts of potassium metarsenite. The calculated composition of such a mixture is:—

| | | | | | |
|------------------|-----|-----|-----|-----|-------|
| Na | ... | ... | ... | ... | 40.12 |
| K | ... | ... | ... | ... | 0.74 |
| CO ₃ | ... | ... | ... | ... | 51.05 |
| PO ₄ | ... | ... | ... | ... | 1.84 |
| AsO ₂ | ... | ... | ... | ... | 2.04 |
| H | ... | ... | ... | ... | 0.02 |
| H ₂ O | ... | ... | ... | ... | 4.19 |

100.00

A trace of chloride was also present as impurity.

Samples of the powder were distributed to sixty-six students, and thirty-seven reports were sent in for examination. The presence of sodium was detected in every instance, but only in fourteen cases was the presence of the small proportion of potassium reported. Carbonic acid was missed in one case, phosphoric in twelve, and arsenious in eleven, while five students detected arsenic but did not report it as arsenite, and one reported it as arsenate only. Twelve students failed to observe the evolution of water when the powder was heated in a dry tube.

The most important analytical points in this analysis were connected with the presence of the phosphoric acid radical along with arsenic in some form of combination. The treatment of the comparatively simple problems which had to be dealt with was, on the whole, fairly satisfactory, and in a few cases it was quite appropriate and successful, but the weakness in the systematic testing for acidic radicals, to which we have previously referred during the winter, was again in evidence and was responsible for numerous mistakes. The original aqueous solution of the powder was alkaline, and the arsenic might therefore be presumed to be present as an arsenite or an arsenate or in both of these forms. After acidification with hydrochloric acid, the solution gave with hydrogen sulphide, at once and in the cold, a yellow precipitate which was completely soluble in sodium hydroxide or ammonium hydrosulphide, and could be shown, with little difficulty, to consist of arsenious sulphide only, whence the presence of arsenic in the lower (arsenious) stage of oxidation could be inferred. After the removal of this precipitate, the filtrate did not give any further precipitate when submitted to the prolonged action of hydrogen sulphide at an elevated temperature, whereby the probable absence of an arsenate was shown. A small portion of the liquid taken at this stage, and suitably prepared, gave with ammonium molybdate the yellow precipitate due to a phosphate, while the main portion (as was to be expected from its containing the phosphoric acid radical) gave no further precipitates with the usual group reagents. With the presence of a phosphate and of arsenic as an arsenite established in the course of the systematic examination for metallic radicals, it still remained to test for an arsenate, and in doing this by means of silver nitrate in a neutral solution no indication of a brown-coloured precipitate was obtained.

A few students endeavoured to reach conclusions regarding phosphate and arsenate by relying upon the difference in the behaviour of these with solution of ammonium molybdate in the cold, on gently warming, and on boiling. The difference is not sufficient, however, to ensure sharp and reliable results—a fact which can be proved by the careful examination of some solutions of phosphates and of arsenates in varying concentrations and under varying temperature conditions.

It is to be regretted that many students appear to be so entirely uninstructed as to the function fulfilled

by boiling a substance with water and sodium carbonate, in preparing a solution to be tested for acid radicals, that they misguidedly carry out the operation as a part of the ordinary routine to be observed in all cases, irrespective of whether it can be of any use or not. Will "Rosie," "Myrosin," "Floramye," and "Mid-Annandale" (to select a representative quartet) kindly note?

PRIZES

The First Prize for the best analysis has been awarded to:—

JOHN TULLOCH, 7 Jessfield Terrace, Leith.

The Second Prize has been awarded to:—

RUTH M. J. NISBET, Flat 1, 67 Queen's Gardens, Hyde Park.

First Prize.—Any scientific book that is published at a price not greatly exceeding fifteen shillings may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about seven shillings and sixpence may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book or books they select.

MARKS AWARDED FOR ANALYSES

1. Correspondents who are unqualified:—

| | | | | | |
|-----------------------------|----|-----------------|-----|-----|----|
| J. Tulloch (1st Prize) | 97 | Caglio | ... | ... | 74 |
| R. M. J. Nisbet (2nd Prize) | 94 | Expectans | ... | ... | 74 |
| Co-optimist | 93 | Floramye | ... | ... | 74 |
| Darwen | 87 | Mid-Annandale | ... | ... | 74 |
| H. Bowness | 86 | Cass | ... | ... | 71 |
| F. O. B. | 84 | Holme | ... | ... | 70 |
| Giraffe | 84 | Lactic | ... | ... | 68 |
| Piff | 84 | Piper Nig. | ... | ... | 67 |
| H. S. Blore | 82 | Diogenes | ... | ... | 64 |
| Barrule | 82 | Nylene | ... | ... | 64 |
| Jerry | 82 | Nil Desperandum | ... | ... | 62 |
| Maria | 82 | Carol | ... | ... | 61 |
| Rosie | 80 | Chopin | ... | ... | 60 |
| G. E. M. | 78 | C. N. G. | ... | ... | 48 |
| Septimus | 78 | Ad lib. | ... | ... | 47 |
| K. T. | 77 | Pongola | ... | ... | 43 |
| Myrosin | 77 | Denise | ... | ... | 42 |
| Deborah | 75 | A. J. C. | ... | ... | 41 |

2. Correspondent who is qualified:—

| | | | | |
|---------------|-----|-----|-----|----|
| Diphenylamine | ... | ... | ... | 74 |
|---------------|-----|-----|-----|----|

TO CORRESPONDENTS

R. M. J. NISBET.—Since the powder dissolved completely in water and did not yield any precipitate with sodium carbonate, the operations of boiling it with water and sodium carbonate and filtering when there was no precipitate were formalities which should have been omitted.

CO-OPTIMIST.—In testing for acidic radicals, you should have examined what occurred on adding silver nitrate to a solution of the powder acidified with nitric acid, and not merely to one made neutral by means of the same acid.

DARWEN.—It does not appear that you applied any test which might have shown the presence of the small proportion of potassium.

H. BOWNESS.—Careful treatment was required, and, as a rule, it was necessary to wait for some time, in order to obtain indications of potassium by the sodium-bismuth thiosulphate test.

GIRAFFE.—The aqueous solution should have been acidified with hydrochloric acid before hydrogen sulphide was passed through it, in which case a precipitate of arsenious sulphide would have been obtained.

H. S. BLORE.—A solution of potassium ferrocyanide which shows more than a faint yellowish tinge is unsuitable as a delicate reagent in testing for traces of iron, since a brightly yellow-coloured solution of the reagent contains traces of substances which yield a blue colour when mixed with almost any acid liquid. When it is

important to establish with certainty the presence of traces of iron, a solution of ferrocyanide prepared immediately before use should be employed. Such a solution will be found to be nearly colourless.

ROSIE.—The array of tests which you advanced in support of your conclusion that tin was present would be almost convincing did we not know that none was there; but note that potassium ferrocyanide and ferric chloride will give a blue precipitate when their solutions are mixed either in the presence or the absence of stannous chloride. The acid fumes evolved when the powder was heated with concentrated sulphuric acid were due to the volatilisation of the latter.

G. E. M.—Had magnesium been present, the powder would not have dissolved completely in water, with formation of an alkaline solution. May the supposed magnesium reaction and the reaction for a sulphate not have been due to traces of calcium and of the sulphuric acid radical in the tap water? You should try to ascertain how the precipitated arsenious sulphide failed, in the end, to give you clear reactions for arsenic.

SEPTIMUS.—The reply to "Giraffe" may explain why you failed to detect the arsenite.

K. T.—Failure to detect a phosphate by means of ammonium molybdate may be due to an unsuitable solution of the latter or to the presence of too much chloride in the solution under examination.

MYROSIN.—Having detected arsenic, you ought to have ascertained the form of combination in which it was present.

DEBORAH.—An alkaline solution should be acidified with dilute sulphuric acid before the ferrous sulphate test for a nitrate is applied to it. You have been completely misled in this analysis as regards carbonate and bicarbonate, through relying upon the behaviour of the solution of the powder with magnesium sulphate, in the cold and on heating. Try a few experiments with known solutions, concentrated and dilute, in the cold and on heating.

CAGLIO.—The reply to "K. T." may suggest how you failed to detect the phosphate. Note that mercuric chloride is reduced by stannous chloride, but not by stannic chloride.

CASS.—The chlorine which you observed to be given off in quantity was probably evolved from chloride present as impurity in the manganese dioxide you used. You leave unexplained the nature of a precipitate in which you report that you found the phosphoric acid radical but no metallic radical. What was it?

HOLME.—We often refer to the useless practice of filtering when there is no precipitate to separate, but if your report is to be credited, you not only filter when there is no precipitate, but wash when there is nothing but the filter-paper to wash. We imagine, however, that you are merely slavishly copying from a table, directions which, as a little reflection should show, are to be carried out only when they actually apply and are requisite. You omitted to report any examination for antimony or tin.

LACTIC.—You did not handle the problem of arsenite, arsenate, and phosphate very suitably or successfully. See the general remarks above.

DIOGENES.—You appear to have got an early impression that an organic acid radical was present, and to have permitted this to warp your judgment with respect to numerous reactions in the course of the analysis. It is difficult to believe that you actually tried some of the tests which you circumstantially report.

NYLENE.—The colour of the precipitate formed when silver nitrate was added to a solution of the powder rendered neutral by means of nitric acid should have shown you that an arsenate was not present. Silver arsenate is brown, while you report a yellow precipitate.

CHOPIN.—Read the latter portion of the reply to "Deborah."

AD LIB.—The precipitate produced by silver nitrate in a solution of the powder neutralised with nitric acid was yellow, and it consisted of silver phosphate and arsenite. A brown precipitate of silver arsenate would only be formed if the arsenite in the powder has been converted into arsenate by some oxidation process, such, for example, as boiling with nitric acid.

PONGOLA.—The precipitate produced by hydrogen sulphide in a hydrochloric acid solution of the powder should have been examined systematically, and an account given of the tests applied to it. The test for an arsenate, as you describe it, could not have given the result you report, since silver arsenate is soluble in dilute nitric acid.

DENISE.—Having concluded, on quite insufficient grounds, that borax was present, you appear to have permitted imagination to play a prominent part with respect to tests designed to prove the presence of a borate. The fact that the sulphuretted hydrogen precipitate did not dissolve completely in hot concentrated hydrochloric acid did not prove that it did not dissolve to some extent, and hence it did not prove the absence of antimony and tin. Try to avoid being misled into fallacious conclusions of this kind.

THE ANALYTICAL TOURNAMENT

The results of the March analysis have varied somewhat the positions of the students who had attained the higher aggregate marks in the four previous analyses. The situation is now one of considerable interest in view of the close of the tournament with the April analysis. The following is the list of students whose aggregates at present exceed 380:—

| | | | |
|------------|---------|-------------|---------|
| Piff | ... 439 | Darwen | ... 388 |
| G. E. M. | ... 428 | H. S. Blore | ... 387 |
| Caglio | ... 426 | Maria | ... 381 |
| H. Bowness | ... 403 | | |

Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of British patents can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

Toothbrush.—A toothbrush, the handle of which is directly connected with a tubular container filled with tooth paste, which can be extruded and applied directly to the bristles by means of a piston. (F. A. Wright and W. Goldschmidt. 194,451.)

Household Dye.—An aqueous solution of a dye is mixed with the jelly obtained by boiling Irish moss with water, to which salicylic acid has been added, and also an addition such as sodium sulphate. For use, the resulting soft jelly is diluted with boiling water. (F. Parker and H. M. Parker.—194,576.)

FRENCH PATENTS

Gloves for Swimming.—Indiarubber gloves having a thin membrane of the same material connecting the separate fingers. (C. Debeaune. B.F. 550,332.)

Preparation of Mannite.—An alkaline solution of glucose is submitted to electrolysis, the positive electrode consisting of mercury. (G. P. Guignard. B.F. 550,381.)

Manufacture of Formaldehyde.—Calcium formate is distilled in a vacuum at about 400° to 450° C. in the presence of charcoal and steam. (G. P. Guignard. B.F. 550,380.)

GERMAN PATENTS.

Suppository Coating.—A suppository coating consisting of gelatin or other substance retaining its shape and not melting at a high temperature (tropics), whilst capable of being removed after cooling the suppository by immersion in cold water. (Athenstädt & Redeker. D.R.P. 372,077.)

Ampoule Sheath and Crusher.—An ampoule, the bulb of which is covered with absorbent material, is fitted inside a bent piece of metal moulded to receive the ampoule. This metal sheath is intended to protect the ampoule, and also to be used as a means of crushing the bulb prior to the application of the contents, e.g., tincture of iodine, etc. (A. Klebansky. D.R.P. 372,076.)

AFTER THE DRAMA.—"What did you think of the heroine?" "Heroin? I thought she was hellebore."—"Beachcomber," in the "Daily Express."

Pharmaceutical Botany

II. The Processes of Life

THE growth and reproduction of living things are so wonderful and complex that biologists are apt to regard living substance as a separate vital entity and enshroud it in mystery beyond human ken. Unfortunately vitalistic conceptions are the negation of progress and it is necessary to deal with life on a material basis. The subject matter which follows is essential if some idea is to be gained of the reality of the same physical laws applying to living and dead matter. The latter is only dead to our ideas, and consists of miniature worlds in motion. Ceaseless change and movement is met with everywhere in nature, and this lesson has borne fruit in preventing fixity of mind and stagnation of purpose in physical science. A new universal science has been born: the science of energetics.

Physical scientists of to-day regard life as a series of equilibrium conditions in which a change of environment results in growth or decay, according to which way the balance of chemical processes is swayed. Thus "acidity" is an equilibrium condition dependent upon hydrogen ion concentration. Even the purest water contains some hydrogen ions. Both life and inorganic analysis of salts depend upon this property which water possesses of dissociating itself and dissolved salts into "ions." Continuous regeneration and breaking up of water molecules is in progress, but the relative proportions remain constant to most delicate tests so long as conditions remain the same. The paradox of nature is that equilibrium results from inconstancy and disorder.

MATTER AND ENERGY

All matter is built up of electricity or electrons in motion. "Energy" manifests itself whenever these change their location, and the orderly sequence in nature is due to energy finding its own level (e.g., water, or temperature), or becoming run down. Then equilibrium conditions ensue as postulated above. The phenomenon of ionisation merely consists in the external shell of an atom losing or gaining one or more electrons. Its chemical reactivity is in consequence enormously enhanced. Such activation of atoms and molecules affords a simple explanation of chemical reactivity and valence and permits an understanding of photosynthesis. The conduction of electricity is no longer a mystery upon the electronic hypothesis of matter, and we must seek an explanation of the transmission of stimulus along a living nerve in the same phenomena. The conversion of light waves into energy available for plant life is no more complex than wireless telephony, the principles are simple, it is the explanations that are involved.

"LIVING MATTER"

Plants are usually built up of units called cells formed from a living growing matrix, which is called protoplasm to indicate it as the origin of life (protos=first, and plasma=formed substance). Protoplasm, which *lives in water*, exhibits ceaseless and purposeful movement. Any attempt to separate it from its watery medium results in death. Protoplasm is albuminous in character, but its physical properties are so complex that assignment of chemical structure to protoplasm is gratuitous. The slime fungi of the tan pit or rotting wood consist of naked protoplasmic masses which can be seen with the naked eye as a viscous jelly-like substance showing both internal circulation and bodily movement as a whole (called amoeboid movement from the animal of that name). Thus at the advancing edge a finger-like protusion is put forward first and then the mass begins to flow forward along this "pseudo-podium" (=false foot). Suitable food acts as an attraction while strong light is shunned, except when reproductive processes begin when the "plasmodium" move towards the light. Thus we see that this naked protoplasmic mass is sensitive to stimuli such as light and can change its habit to suit circumstances. Fig. 1 depicts minute specks of living matter issuing from "spores" (into the film of water causing their resumption of growth or "germination"). The particular plant-animal shown passes through resting (b), motile (c), and amoeboid (d) stages before many swarm

together to form the adult organism. Its habits are those of an animal in engulfing solid food, but lack of nutrition or water compels enclosure of protoplasm in waterproof walls. The only evidence of plant characteristics in this spore formation. The secretion of a cell wall was probably the first stage in the evolution of plants, as thereby protoplasm need no longer be in equilibrium or "isotonic" with its surroundings. Thus "turgidity"

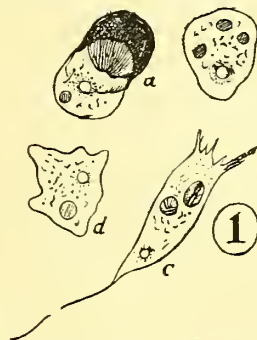


Fig. 1.
Didymium difforme
a. Swarm-cell of slime fungus escaping from the spore-membrane;
b. Newly hatched swarm-cell, containing a nucleus and three vacuoles;
c. Swarm-cell, with two vacuoles containing bacteria—another bacterium is just caught by a pseudopodium.
d. Amoeboid swarm-cell.
Magnified 720.

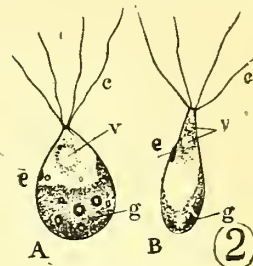
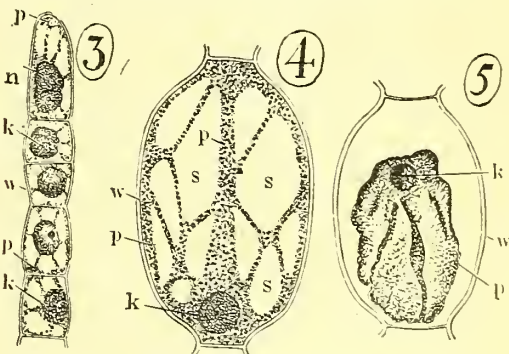


Fig. 2. Motile Zoospores
A. *Ulothrix zonata*
B. *Draparnaldia plumosa*
c. Cilia.
v. Vacuoles.
e. Eye spot sensitive to light.
g. Green plasma.
Magnified 300.

or pressure within the cell became possible, and the plant could become fixed and stand upright. The lower plants have a remarkable facility for resuming naked motile animal-like state for purposes of reproduction in order to swim to new feeding grounds. Fig. 2 shows motile zoospores (zoon=animal) which are propelled by the violent motion of whip-like extensions of the naked protoplasm. These possess an eyespot sensitive to light, and the zoospore moves towards that illumination which is most favourable, the protoplasm changing its reaction to stimulus to suit circumstances. Thus when the motile period is ending the zoospore from a filamentous plant, such as *Ulothrix*, swims away from light, secretes a cell wall, and becomes attached to substratum.



Cells from the staminal hairs of *Tradescantia virginica*.
Fig. 3. End cells of a very young hair.
Fig. 4. Full grown cell.
Fig. 5. Cell containing protoplasm killed with alcohol.
w. Cell-wall.
p. Protoplasm.
s. Cell-sap cavities.
k. Nucleus.
n. Nucleus in act of division.
Magnified 600.

METABOLISM

The presence of protoplasm within cells may be obscured by other contents derived therefrom, such as starch grains, but cells devoid of protoplasm are dead. The universal characteristic which distinguishes protoplasm as a living substance is its power of growth or metabolism. Its continual movement necessitates expenditure of energy, which is sup-

supplied by actual internal combustion. This process, known as respiration, consists of oxidation of living substance, indeed plants absorb oxygen and exhale carbon dioxide just the same as animals.

This degradation of organic material is known as catabolism (cata=down, bolos=throwing). The living plant would be quickly burnt out unless the protoplasm continually replaced its lost substance by synthesis from the food materials present in the watery solution in which it exists. The building-up process is termed anabolism (ana=up). Growth results when anabolism exceeds catabolism, death when the reverse process continues for too long a period. The primary food of protoplasm consists of sugars and simple amino-acids such as asparagine. The energy derived from burning up one portion is used in building the remainder into more complex proteins and protoplasm itself. Green plants derive the energy of life from sunlight. Chloroplasts (see below) have the power of activating carbon dioxide and

synthesising their own supply of essential foodstuffs. In this process of photo-synthesis oxygen is returned to the atmosphere.

In its earlier stages the growing cell is completely filled with protoplasm, but as it increases in size cavities (or vacuoles) appear therein, and often the interior of the cell becomes one large sap cavity. Figs. 3, 4, 5. The portion of the protoplasm lining the cell wall or vacuole is firmer and clearer than the bulk of the protoplasm, and forms a "permeable" membrane regulating the passage of food substances and excretory products.

NUCLEUS

Embedded in the protoplasm is the nucleus, the directing

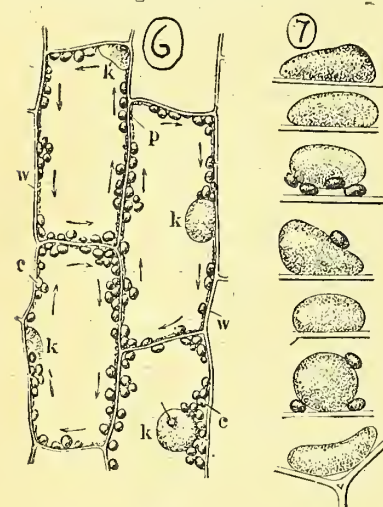


Fig. 6.
Cells with rotating protoplasm from a leaf of *Vallisneria spiralis*.
w. Cell membrane.
p. Protoplasm.
c. Chlorophyll granules or chloroplasts.
k. Nucleus.
(The arrow shows the direction in which the protoplasm moves in each cell.)
Magnified 600.

Fig. 7.
Different forms assumed by a Nucleus during half a minute.
Magnified 1,000.

influence or brain of the cell. All cell movements are to and from the nucleus, which is itself in active motion. Figs. 6 and 7. The nucleus is the initiator of cell division, and its minute structure forms a science of its own (cytology). It is also the transmitter of hereditary characters (genetics). Any standard text-book illustrates in detail the elaborate process of nuclear division (or mitosis), the whole object of which is to ensure exactitude in longitudinal division of its "chromatin" substance into two like portions. Chromatin is so named because of its facility for absorbing microscopical stains; it is the most highly phosphorised plant substance.

PLASTIDS

Plastids are other specialised cell contents of protoplasmic nature, those coloured green with chlorophyll (chloros=green, phyll=leaf) being absorbers of light, and make photo-synthesis possible. Colourless plastids, or leucoplasts, occur in subterranean organs, and are of use in connection with storage of starch; when exposed to light they turn green (e.g., greening of potato tubers when partly uncovered). Chromoplasts are degenerate chloroplasts which have become coloured (in yellow or brown flowers and autumnal tints of dying leaves). The general protoplasm of the cell, distinct from the nucleus and plastids, is termed cytoplasm (cyto=cell).

Wireless Problems

A MEMORANDUM has been presented to the Postmaster-General by the Radio Society of Great Britain, which represents about 160 wireless associations having a membership of approximately 30,000 persons, ranging from men of science to students, explaining how the present conditions in regard to broadcasting seriously affect wireless experimenters, and suggesting a solution of the prevailing licence difficulties. Though the Society welcomed the advent of broadcasting, it is found that, since the inauguration of the latter, practice in the art of receiving signals with modern apparatus has been made difficult or physically impossible in certain areas at certain times. Many new restrictions have been imposed on old licence-holders, and the obtaining of new licences has been made less easy. The principal ways in which members of the Society and others are affected adversely are summarised as follows:—

(1) Experimental receiving stations within a few miles of a broadcasting station are jammed so badly that practice in picking up other stations, in learning the Morse code, and in testing apparatus are impossible during the hours usually available to the experimenter.

(2) Experimental transmitting stations are greatly hampered because the co-operating station is jammed, and because it is impossible to intercept before transmission on the licenced wave-length in the manner required by the permit. A branch of science with high potentialities is thus destroyed during a large proportion of each day.

(3) The existing broadcasting regulations prohibit an owner from studying or improving his own apparatus. This prohibition, if it could be enforced, would be an edict compelling ignorance, and would destroy the only chance that broadcasting had of being of national educational value, as well as an entertainment.

(4) The granting of experimental licences has been made more difficult rather than more easy, and serious would-be learners of wireless science are hindered in their studies.

(5) The selling of apparatus in sealed cases is tending to lower the standard of manufacture, and the limiting of designs to certain standard types useable only in this country cannot but react most injuriously upon all attempts to build up an export trade in wireless apparatus.

Among a number of suggestions for the amelioration of these disadvantages are the following:—

(1) The broadcasting stations should be prohibited from emitting high-frequency harmonics or overtones, and should be restricted absolutely to their proper wave-lengths.

(2) The power to be employed should not be allowed to exceed an allotted figure.

(3) Modern methods of modulation should be made compulsory.

(4) More blank hours should be arranged for the use of students of wireless, especially on Sundays, and the hours fixed should be adhered to. For the benefit of the listener-in the blank hours might be taken in rotation by the various broadcasting stations.

As it is desirable that every competent British subject shall have the right to possess a licence for experimental work, and be entitled to construct and to use his own apparatus under the licence, and not be coerced into paying any sum or sums towards the Broadcasting Company if he does not use the entertainment they provide, it is considered that the following scheme of licensing is likely to be satisfactory:—

(1) The broadcasting licence for use with apparatus marked B.B.C., fee 10s.

(2) The experimental licence at a low fee for qualified persons not listening-in to the broadcasting transmissions, say 10s.

(3) The listening-in licence, allowing the use of any apparatus, bought or home-made, for the purpose of listening-in, fee 20s. The Broadcasting Company might supply holders of this licence with a neat badge, changed annually, as acknowledgment of payment of the fee. Such a badge suspended near the apparatus would serve as a guarantee of payment for the entertainment.

The Society cannot accept the suggestion that any form of licence should be endorsed with a requirement that any component parts purchased must be marked B.B.C., but would offer no objection to an endorsement limiting purchasers to components marked of British manufacture. Any action taken should not affect the issue of transmitting licences to experimenters.

Births

Notices for insertion in this column must be properly authenticated.

TEUNON.—At 29 Western Road, Littlehampton, on April 2, the wife of W. Teunon, M.P.S., of a daughter.

Marriages

KEALL—HUBBARD.—At Aylesbury Parish Church, on April 5, by the Vicar, John Keall, chemist and druggist, eldest son of the late Mr. Holmes Keall, chemist and druggist, to Dorothy May Hubbard, eldest daughter of Mr. W. P. Hubbard.

RICHARDS—FERNIE.—At All Saints Church, Penarth, on March 28, William David Richards, chemist and druggist, to Violet Agnes Fernie, B.A., Dunedin, Stanwell Road.

Silver Wedding

WATSON—LEWIS.—At the Parish Church, Tottenham, on April 14, 1898, by the Rev. F. Speke, Herbert Shepley Watson, M.P.S. (T. H. Bateman & Co., chemists, 223 Finchley Road, London, N.W.), son of the late Mr. Alfred Watson, solicitor, Leeds, to Florence Mary, eldest daughter of Mr. G. D. Lewis, Tollesbury, Essex.

Deaths

DE SOUZA.—A cable has been received by the London branch of E. M. de Souza & Co., wholesale chemists, Rangoon, announcing the death of Mr. J. C. de Souza, son of the late Dr. E. M. de Souza. Mr. de Souza, who was about thirty-two years of age, was one of the principals of the firm in Rangoon, and only returned there last November after a twelve months' stay in this country, during which time he made many friends in the drug-trade. He always had a hearty welcome for the Far Eastern representatives of the wholesale trade, among whom he will be much missed.

GEE.—At Chywartha, Trewirgie Road, Redruth, on March 21, the wife of Mr. A. C. Gee, chemist and druggist, Penryn Street, aged fifty.

HALLAWAY.—At 5 Devonshire Street, Carlisle, on April 4, Mr. Robert Railton Hallaway, B.Sc., Ph.D., Ph.C., eldest son of the late Mr. John Hallaway, Ph.C., aged forty-eight. Mr. Hallaway was educated at Carlisle Grammar School, and served a three years' apprenticeship to his father. His next period was passed at Armstrong College, Newcastle-on-Tyne, where he took the B.Sc. degree before he had completed his third year of study. Among many distinctions won by him was a research scholarship awarded by the Commissioners of the 1851 Exhibition. Mr. Hallaway continued his studies in organic chemistry at Bonn and Heidelberg, taking the degree of doctor of philosophy at the latter University in 1900. Returning to England, he became a pharmaceutical chemist early in 1902, from which time he was associated with his father in business. Mr. Hallaway was a man of much culture and unflinching courtesy, and his death at a comparatively early age is deeply regretted in his city. He was manager of St. Patrick's Schools, an active supporter of the St. Vincent de Paul Society, and a member of the Carlisle Technical Education Committee.

HARRINGTON.—At his residence, Waverley Villa, Montagu Road, Felixstowe, on April 9, Mr. Arthur Harrington, Ph.C., for many years in business at Needham Market, and previously at Walsham-le-Willows, aged sixty-nine.

HUGHES.—At Llanidloes, on March 31, Mr. Robert Hughes, chemist and druggist, aged eighty-one. Mr. Hughes was in business in Llanidloes for sixty years. He filled the office of Mayor in 1878-79, and was for a considerable time postmaster of the town. In Church and Masonic affairs he was also prominent, and became widely known to more than one generation in the district.

Mr. Hughes was at business only three days before his death. The funeral took place on April 3, and was largely attended.

ORDIDGE.—At 59 Edmund Road, Alum Rock, Birmingham, on April 11, Mr. Walter Ordidge, chemist and druggist, formerly of Wheeler Street, Aston, aged forty-four.

WINGROVE.—At Buff House, Banstead, on April 8, Mr. Stephen Wingrove, chairman and managing director of Spratt's Patent, Ltd., aged sixty-seven.

Personalities

MR. B. C. JUKES, chemist and druggist, has been elected President of the Basingstoke Chamber of Commerce.

MR. J. W. ADAMSON, chemist and druggist, Colwyn Bay, has been elected a member of the Colwyn Bay Urban Council.

COLONEL S. W. FAIRCHILD (Fairchild Bros. & Foster) is arriving in London in the course of next week on a brief visit.

At a general meeting of the members of the Royal Institution, held on April 9, the Duke of Northumberland, President, in the chair, a resolution of condolence with Lady Dewar on the death of Sir James Dewar was moved and carried unanimously.

MR. R. H. DE LA TASTE BRISTOW, head of the buying department at the chief offices of Burroughs Wellcome & Co., who has recently completed twenty-one years' service with the firm, has been presented with a fitted wardrobe in Jacobean oak, with a tablet bearing an appropriate inscription.

MR. EDWARD MULLETT, 4 New London Street, E.C.3, has been appointed agent for Great Britain of the Neroli Distillation Co., Contesse, Messina. M. Marcel Perrier, director of Elie Reboul & Co., Nîmes, France, intends visiting this country from April 16 to 21, and will call upon friends in London, accompanied by his agent, Mr. Mullett.

MR. F. A. LAWMAN, 56 Ramillies Road, Bedford Park, London, W.4, informs us that he is taking up the post of sales and general manager to the Vinolia Co., Ltd., Lever House, E.C.4. Mr. Lawman, who qualified as a chemist and druggist in 1907, has for some time past been well known in the trade as sales manager to Parke, Davis & Co., Beak Street, W.1, and his many friends will wish him continued prosperity in his new sphere.

At a meeting of the Feltmakers Lodge, 3839, at the Imperial Restaurant, Regent Street, London, on April 9, Sir William Veno was installed as Worshipful Master. The ceremony was carried out by Wor. Bro. J. J. Edwards, a Grand Officer of England. Amongst those present were the following members of the Manchester Pharmaceutical Masonic Association:—Wor. Bro. H. Thompson, chairman; Wor. Bro. C. H. Griffiths, past chairman; Wor. Bro. D. Dickson, past chairman; Bro. H. Woodhead, secretary; Wor. Bro. A. H. Lyons, D.C.; as the special guests of Sir William Veno.

MR. S. H. PLATTIN, the recently elected chairman of the Nottingham and District Branch of the Pharmaceutical Society, served his apprenticeship at Fakenham, of which Norfolk town he is a native, and after gaining further experience in Norwich, London, Chelmsford and Nottingham, qualified in 1903. Two years later he acquired the business of Mason & Radford (successors to Newball & Mason), Derby Road, Nottingham. A biographical sketch of Mr. Platin, with portrait, appeared in the *C. & D.*, I., 1922, pp. 851 and 856. To what was then said may be added the following appreciation: "Mr. Platin is a keen and capable business man, who takes a pride in and dignifies the professional side of his calling."

THE index figure of wholesale prices for March in France is 490.2, compared with 487.6 in February.

Trade Notes

FAX INDIGESTION CURE is a speciality of Fax, Ltd., manufacturing chemists, Salisbury.

H. M. COHEN & Co., 32 Minories, London, E.1, invite inquiries for quotations and samples of first-grade sponges.

CARDED PILLS.—Matthews & Wilson, Ltd., 6-8 Cole Street, Borough, London, S.E.1, introduce a new line of packed pills, retailing at 3d. a box.

VAL-ROSA VANISHING CREAM, which is made by the Val-Rosa Co., 33 Kirkstall Road, Leeds, retails at 1s. 6d. per pot. The makers invite inquiries from chemists.

LUTON FABRIC DYES.—Whitaker & Co., Kendal, have issued further show-cards advertising the Luton fabric dyes. The show-cards are beautifully produced in colour.

VICHY-CÉLESTINS.—From April 16, the price of Vichy-Célestins mineral water is to be reduced. The advertisement in this issue of Ingram & Royle, Ltd., gives the details of the alterations.

LAVOCLEAN.—Butler & Crispe, 80-82 Clerkenwell Road, London, E.C.1, have been appointed sole distributing agents to chemists for Lavoclean, a cleanser for the lavatory. It retails at 6d., and 1s. 3d. per tin.

PHOTOGRAPHIC DEVELOPING.—Christie & Hodgson, Ltd., 246 West Street, Sheffield, who have organised a "quick despatch" service for developing and printing, invite applications from chemists for their price-list.

ANDREWS' LIVER SALT.—Scott & Turner, Ltd., Gallowgate, Newcastle-upon-Tyne, give particulars of the advertisement boom in connection with Andrews' Liver Salt. A bonus for the retailer is a feature of the scheme.

BIDOR.—An advertisement campaign is commencing in the Press, on behalf of Bidor headache cure. The retail and wholesale prices are given in the advertisement of the sole distributors: The British Harold F. Ritchie & Co., Ltd., 35 Farringdon Road, London, E.C.1.

AN ABLE REPRESENTATIVE.—An up-to-date and comprehensive price list, easy of reference and well illustrated, is always appreciated by the chemist. All these conditions are fulfilled by the new half-yearly catalogue of May, Roberts & Co., Ltd., Clerkenwell Road, London, E.C.1, which may be obtained free of charge by sending a postcard. Part 1 of the list deals with sundries and glass; Part 2, proprietary medicines; Part 3, photographic goods; Part 4, stationery and tobacco; Part 5, drugs and counter specialities. The catalogue is the only "traveller" sent out by the company—and it is an excellent one.

"**LA PARFUMERIE DU SUD-EST**" is the title of an attractive new periodical emanating from Grasse, France, which will be devoted to the interests of the perfumery trade in general and to those of the headquarters of the perfumery and allied industries (Grasse and surrounding districts) in particular. The numerous illustrations, some of which are in colour, give a note of distinction to this finely produced journal from an artistic point of view. At the same time, the scientific and commercial side of the industry is not overlooked, and the perfumery trade will no doubt benefit from the additional publicity which "**La Parfumerie du Sud-Est**" is likely to give.

THE INDEX TO THE CHEMIST AND DRUGGIST is published half-yearly. It is not sent out with the weekly issue, but is sent to subscribers on application. A list is kept of those who desire to receive the index as published, and we shall be glad to add the names of any other subscriber.

NEW ZEALAND NOT READY FOR GERMAN GOODS.—The "**Frankfurter Zeitung**" reports that the New Zealand Customs, in reply to an inquiry, state that at present there is no prospect that the importation of German goods would be permitted "in the near future." This question might possibly come up for discussion when Parliament reassembles in June of this year.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Monday, April 16

Sheffield Pharmaceutical and Chemical Society, Church House, St. James Street, at 8.30 p.m. Mr. Beruard Ellis, LL.B., on "The Pharmacist, Past and Present."

Tuesday, April 17

National Drug and Chemical Union (Public Pharmacists' Section), Progressive Pharmacy Club, Arundel Hotel, Arundel Street, London, W.C., at 7.45 p.m. Meeting.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, London, W.C., at 8 p.m. Evening meeting. Messrs. C. E. Corfield, B.Sc., and P. A. W. Self, B.Sc., on "The Chemical Tests and Standards of the B.P., 1914, and their Applicability to the Administration of the Food and Drugs Act."

Wednesday, April 18

Edinburgh Chemists', Assistants', and Apprentices' Association, 35 York Place, at 8 p.m. "Illegible Prescription Tests," and "Notes from the Dispensing Counter," by Miss I. A. Purdie, Ph.C.

Newcastle-upon-Tyne Pharmacists' Association.—Ald. J. D. Rose on "Jarrow Monastery, the Home of the Venerable Bede."

Pharmaceutical Society of Great Britain (Bolton Branch), The Camera Club, Mawdsley Street, at 5.30 p.m. Lantern lecture by Mr. T. Midgley.

Pharmaceutical Society of Great Britain (Wolverhampton Branch), Victoria Hotel, Wolverhampton, at 7.45 p.m. Professor Greenish on "Drugs and how they reach this Country."

Thursday, April 19

Chemical Society, Burlington House, Piccadilly, London, W., at 8 p.m. "The Influence of Nitro-groups on the Reactivity of Substituents in the Benzene Nucleus," Part VII., by K. Ibbotson and J. Kenner; "The Chemistry of the Three-carbon System," Part I., by S. F. Birch, G. A. R. Kon and W. S. G. P. Norris; "On the Promotion of Catalytic Reactions," Part I., by S. Medsforth.

North-East London Pharmaceutical Association, St. John's Institute, Urswick Road, Hackney, at 3 p.m. Mr. W. Shadforth, Ph.C., "Citizenship."

Business Changes

MR. A. B. SHERREN, chemist and druggist, late of White Rock, Hastings, has purchased the pharmacy of Mr. R. Brown, chemist and druggist, 18 Brighton Road, Crawley, Sussex.

MR. S. A. SHEARD, chemist and druggist, Morley, Leeds, has acquired the businesses of Mr. A. Mortimer, chemist and druggist, 9 Leeds Road and 11 Cambridge Crescent, Harrogate.

Information Department

INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated:

| | |
|--|--|
| E/153. A.C.D. composition stoppers | B.44. Listerine (or Linthorpe) Castor Oil |
| S/44. Aspermin suppositories | A/273. "Longo" licorice in sticks |
| E/94. Bartocene | B.114. Never-ill |
| P/273. Carbide and Carbon Chemical Co. (address) | M/273. Perkeo Wine |
| M/114. Crocker's Mercury Tro. poicide | M/94. Phinitin tablets |
| W/54. Gerard's hair tonic | E.94. Septol |
| S/254. "Glide" liquid gold | W/114. Sodium soyate |
| S/54. "Grasp Mee" dental plate brush | L/104. "Star" brand carbolic soap |
| W/104. Lactona tonic food. | L/104. T.C.P. disinfectant (for dentists' use) |

INFORMATION SUPPLIED

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, **THE CHEMIST AND DRUGGIST**, 42 Cannon Street, London, E.C.4.

| | |
|------------------------------|--------------------------------|
| Beldam rubber sponges. E/94 | Kolynos tooth paste. S/55 |
| Blood cherries. B.44 | Mason-Pearson hair brush. A/74 |
| Butyn. W/54 | Nostroline. D/283 |
| Celluloid varnish. N/54 | Oiled cambrics. T/104 |
| Collapsible tubes. T/74 | Phenoline. D.34 |
| Cutoxine (cattle wash). L/44 | Sprinkler tops. D/74 |
| De Sanctis Gout Pills. M/94 | Varivane. M/74 |
| "711" eau de Cologne. J/74 | Wood and bone spatulas. E/44 |
| Gymnasium apparatus. R/104 | |
| Ipecopan. F/74 | |

Observations and Reflections

By Xrayser II.

The "Compound Drug"

of the Sale of Food and Drugs Act, to which reference is made in your article on "Testing Dispensing," is, literally, non-existent. There is no such thing as a compound drug, a drug being an original, simple, medicinal substance, whether taken alone or as an ingredient in a mixture. Gregory's powder, for instance, is not one drug but three. Possibly no injustice is done by treating Gregory's powder as a drug under the Sale of Food and Drugs Act, but it is very different with many, probably with most of the prescriptions we dispense, compounds of so miscellaneous and often self-contradictory a character that their complete analysis is almost impossible. I can understand the reluctance of a scrupulously honest man to incur a suspicion of trying to evade justice under a cloud of technicalities of which the importance is not appreciated by outsiders; but ours is a highly technical business, and when the scales of justice are so weighted against us as they are now no point of legal validity ought to be neglected by the defence. I should like to know, by the way, to whom we sell the medicines dispensed under the Insurance Act? Not to the patient certainly, hardly to the Insurance authorities, who merely fee us for dispensing them. It might surely be argued that these authorities are themselves the real sellers and we their servants only.

Mr. J. Rutherford Hill

is a man with whose public utterances I have usually found myself in hearty agreement, and from whom, therefore, I differ with some diffidence; but I confess that his reply to Mr. Chaston Chapman on the subject of the title "chemist" (*C. & D.*, April 7, p. 465) puzzles me not a little, and if its apparent meaning is its real one I must regard it with feelings akin to amazement. For what Mr. Hill seems to say is (1) that "pharmacist" is an inferior title to "chemist" as applied to us, and (2) that our right to the latter needs strengthening by such considerations as that some of us are employed in chemical manufactories, have a considerable practice in analytical chemistry, or are even members of the Society of Chemical Industry. To the former of these propositions Mr. Hill certainly commits himself, and so the whirligig of time brings in his revenges. For thirty years or more we chemists and druggists were denied this title, which was used only as a gilt-edging for Major men, as a synonym, in fact, of the still sacred "pharmaceutical chemist." I have always contended that, in itself, "chemist" is a higher title than "pharmaceutical chemist," and that, consequently, the pother made in defence of the latter is absurd. This is now virtually admitted by Mr. Hill. So much truth must be allowed to his proposition as this implies, but the "chemist" of "chemist and druggist" connotes nothing that is not covered by "pharmacist." If there is any inferiority at all in the latter it is only that whereas we are chemists by a process of natural selection we are pharmacists by the grace of the Pharmaceutical Society. Mr. Hill's apparent admission that a chemist and druggist is not "in reality a 'chemist' in the proper sense of that term" unless he is something more than a pharmacist is most dangerous. Pressed to its logical issue it gives away entirely our claim to the title, and I cannot think Mr. Hill realises what it means. Personally I have very little regard for titles, but to that of "chemist" I attach more importance than to any we possess, for it is the only one that has a distinct commercial value; we must defend it to the last, but only on the right ground, and it would be both safer and more appropriate if we could always qualify it with the epithet "pharmaceutical."

The Marking of Prescriptions

could hardly increase the evil of cutting, but would tend rather to decrease it. The cutter will cut whether he knows what was paid before or not, and the more he is in doubt as to what

was paid the lower he will cut. Did he know the previous price he would approach it as nearly as he could while still keeping below it, not knowing if he cuts to the bone that he may be below it. I speak with the assurance afforded by a long and careful study of the idiosyncrasy of the low-grade pharmacist, with whom I had, for my sins, a good deal to do in days gone by. Probably men of the type I have in mind are rarer than they once were, and I have no doubt that most pharmacists now would be glad to know what had been paid before mainly in order that they might not unwittingly undercharge. We all desire as near an approach to uniformity as is possible.

We are to have a Fight,

apparently, for the vacant seats on the Council. I do not see very much to fight about just now, but when the wigs are on the green we may perhaps find more than one *casus belli*. Both the new candidates are good men, and each will doubtless have something to say for himself. In any case a fight tends to keep the air fresh, and it is not good that any member should be allowed to forget that, however useful, he is only mortal. This contest, recurring every three years for every one of them, serves the purpose of "the boy at Philip's ear."

The Assistants' Union

seems to have its finger in a good many pies and to be inclined to meddle in matters that are too high for it. A union that has not yet succeeded in organising itself on a satisfactory basis is surely a little over-bold in expecting to influence materially such international affairs as are the subjects of several of the resolutions passed at its recent annual meeting, the Versailles Treaty and Soviet Russia, for example. There is no great harm in passing resolutions that are not in the least likely to have any effect, but though we may admire the generous ardour that prompts them we cannot but think it would be wiser to spend it in the cultivation of their own garden. To call the attention of the Retail Pharmacists' Union to the fact that there is no minimum rate of wages in existence will not carry the assistants very far; the establishment of such a rate is their business, not that of the R.P.U. They are simply translating their own convenience into other people's duty if they expect the R.P.U. to do it.

The Congrès International des Sciences Historiques,

to be held in Brussels and Ghent from April 8 to April 15, is to discuss such a variety of subjects—over 250 "Communications" have been arranged for, dealing with every conceivable department of knowledge—that it is not strange to find pharmacy included among them. The paper of most interest to us will probably be that of M. Oscar van Schoor, pharmacien, Antwerp, on the history of the pill, an abstract of which is included in the "Sommaires des Communications" now before me. The pill, we are told, is one of the most ancient of pharmaceutical forms; it is mentioned by Hippocrates, Galen, Pliny and Celsus; but the ancients tell us little of the *modus faciendi* in use in their time. It was not, says M. van Schoor, till the end of the sixteenth or the beginning of the seventeenth century that the invention of the *signet* instrument made it possible to divide pill masses with precision. This instrument was the first rough form of the modern pill machine, described for the first time by Baumé, in his "Elements de Pharmacie" (Baumé, born 1728, died 1804). The practice of gilding and silvering pills has been traced back to the fifteenth century (Wootton conjecturally credits Avicenna with having introduced it), but coating them with sugar, gelatin, talc, etc., is of quite recent date. In ancient pharmacy pills were kept in mass; the practice of keeping them in notched rolls is said to be not yet entirely discontinued, but M. van Schoor does not appear to refer to this. Another communication to be made to the congress by M. M. H. J. Sevilla, Médecin Vétérinaire, Paris, on Greek veterinary practice, especially with reference to the treatment of pulmonary affections, cannot fail to be of great interest.

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Editorial Articles

Testing Dispensing III.

THE previous articles of this series have dealt with the incidence of the Sale of Food and Drugs Acts upon the sampling of dispensing, the defences to charges of "adulteration" and the analytical difficulties. The fetish of the impeccability of the public analyst is a convenient one for the magistrate who is hearing charges under the Sale of Food and Drugs Acts, but that the analyst is not always correct in his work is shown by the results obtained by the Government Laboratory in those cases where the check sample has been examined. The Government Laboratory results often differ from those of the public analyst, and it should be remembered that it is only in a small proportion of cases that the check sample is utilised. Owing to the difficulty in adequately defending some of the cases brought under the Sale of Food and Drugs Acts the defendant is quite content to pay the fine and costs inflicted at the first hearing without risking further expense. That we have not exaggerated the difficulties of correct analysis, we recall the evidence in 1913 of Sir J. J. Dobbie, F.R.S., before the Select Committee on Patent Medicines. Sir James, at that time, was Government Chemist, and his evidence (*C. & D.*, May 3, 1913, p. 57) shows that he was under no misapprehension as to the impossibility in some cases of accurate analysis

of mixtures of drugs. "Speaking generally," he said, "it is quite practicable to deal with most of the mixtures of drugs which are prescribed in ordinary mixtures, but when a number of drugs are mixed together the difficulty of analysis increases with the complexity of the mixture, and in certain cases the difficulties eventually become so great that the complete analysis of the mixture becomes impracticable." This was well shown in some of the results obtained by the Government Laboratory, with samples sent for analysis by the Select Committee. The point of these remarks is that the defence should get the analysis checked by the Government Laboratory in all cases where the alleged deficiency is only small in amount. We are glad to note that Mr. E. J. Parry's suggestion regarding incomplete analytical certificates (*C. & D.*, March 31, p. 451) is being acted upon, and we hope that before long one or more of the charges of inaccurate dispensing will be in the higher courts. Mr. Parry, in his article (*C. & D.*, March 31, p. 451) dealt with the question of protection by disclosure or contracting out of the Sale of Food and Drugs Acts. This is a position which chemists have in reserve if the present campaign of persecution is persisted in. In a recent interview Dr. Trotter informed the deputation that there was one way out for chemists, and on being questioned, he said: "You should take dispensed medicines outside the Act by saying the medicine does not comply with the Sale of Food and Drugs Act." This, as we have stated, is a two-edged weapon, but though Dr. Trotter is anxious for absolute accuracy in dispensing, he was conscious, apparently, that there is something wrong with the methods of the taking of samples of dispensed medicine. This is, however, a method of action which may have to be adopted if the present persecutions continue.

Panel Doctors' Dilemma

THE proposed reduction for 1924 in the flat rate payment of panel doctors under the National Insurance Acts, is already creating a good deal of feeling in medical circles. It will be remembered that consequent upon the cessation of the extra grant from the Treasury which increases the capitation fee for doctors beyond the two-ninths of the cost of medical benefit allowed by the first National Insurance Act, the amount will automatically revert to the original figure unless one or two alternatives are accepted. The fee, at present, is 9s. 6d. per insured person, and unless money is forthcoming from other sources the amount will, in 1924, be 7s. 3d. a head. The sources of additional revenue designed to keep the fee at its present level (in the absence of a State grant) are (1) increased contributions from either the insured person or employer, and (2) grants from approved societies. As regards the first of these proposals, it is hardly likely that a Bill to effect increases in the contributions would pass the House of Commons, in view of the complaints as to the inadequacy of the present medical service. Many panel doctors recognise their obligation to give insured persons excellent service, but a section of medical practitioners are wanting in this respect. If the approved societies are to contribute part of the 2s. 3d. required to make up the amount to 9s. 6d., it is only reasonable that the societies should exercise greater control than hitherto upon the administration of medical benefit, and this is a consummation which, according to Dr. Cox, secretary of the British Medical Association, doctors would resist at all costs. The present position is that the Insurance Acts Committee of the British Medical Association is to meet the Ministry of Health, on April 26, to discuss proposals. The various Panel Committees are then to consider the matter, and on June 7 there will be a conference

of Panel Committees to decide upon the attitude to be taken by the medical profession. Panel doctors, generally, do not want to give up practice under the National Insurance Acts owing to the comparative ease with which the payments are earned. Dr. Cox points out that it would require 3,000 panel doctors to refuse abatement of terms before a strike would be effectual. He also stated that unless 66 per cent. of resignations of panel practitioners are in the hands of the Committee "there will be no fight." This is the dilemma which the panel doctors have to face.

The Turpentine Position

IN consequence of the comparatively light imports of American turpentine spirit and moderately good and fairly regular deliveries at this end, reserve stocks have been encroached upon further lately, the total of these (including a very small quantity of French spirit) being about 11,000 barrels. The course of the market has aroused more interest since the holidays, and it looks as if the tail-end of the season will not be gone through without some little squeeze being experienced, as is usually the case prior to a new crop being available; similar indications have become apparent in the French market. At the beginning of next month at the very earliest, it is quite possible that small quantities of new crop will find their way from France, but American distillate cannot be expected for about another six weeks so far as our market is concerned. There has certainly been no rush of buying on the part of the home trade of late, but the tendency of the market has been decidedly harder for some few weeks past, and the trend of prices is not unlikely to continue upwards. For one thing, American reports have proved firmer, the position of holders being favoured by a steady outlet in connection with spring trade needs. The increased American price has obviously stiffened holders' ideas on this side, especially in view of the appreciable set-back in the dollar-rate of sterling. A stronger feeling, at any rate, has got hold of the market, although there is perhaps not much incentive at the current relatively high prices to indulge in speculative purchases for deliveries this side of midsummer. In regard to far forward contracts over the second half of the year, the case, however, differs, considering the relatively low figure of about 80s. per cwt., at which dealings were initiated some time back. The fact has not escaped attention that the advance in value in that direction has kept pace more or less in proportion with that experienced in near months. Some speculative interest has been evinced at the substantial discount ruling on July-September and July-December contracts, quotations for which are now at around 87s. 6d., compared with about 114s. for near positions. It will be interesting to watch to what proportion the inevitable adjustment that must eventually ensue either way will become accomplished within the next few months. It is somewhat difficult to understand why the discount this year so far on forward spirit has been so much greater than a year ago, when the difference was about 10s. per cwt. In the first quarter of last year, it is true that the market was abnormally depressed under exceptional circumstances with the price at about 65s. for spot delivery, but in the first week in April there was a rapid rise to well over 71s. A similar advance has been witnessed this year at about the same period, and there can be little doubt that as happened last year the new season in the United States will be reached with but little of the old surplus left. Meanwhile, American exports to this side will probably be light, and the London stocks thus threaten to be again reduced to very low proportions. As will be seen from

the record of extreme prices for spot delivery given below for the last two years and since, the lowest point touched so far this year of about 101s. is some 40s. and 56s. respectively over the bottom figure reached in the previous two years.

| London spot price | Highest | Lowest | Average price |
|--------------------|---------|--------|---------------|
| | s. d. | s. d. | s. d. |
| 1921 | 115 0 | 44 6 | 72 9 |
| 1922 | 125 0 | 61 3 | 89 4 |
| 1923 to April 7 .. | 113 9 | 101 0 | — |

Market possibilities, nevertheless, favour an advancing movement, and a normal trade outlet seems fairly well assured under brighter industrial conditions. The comparatively high prices that have ruled for some considerable time past should in some degree help to stimulate production in the new season, but even so, it is probable that the new supplies will be for a time easily absorbed, unless prices are forced to an extravagantly high level under fresh aggressive speculation, seeing that in America there has been a more or less continuous tendency towards inflation in other commodities. The following statistical returns represent incomings over a certain period, also London deliveries, stocks, etc., and are of interest:—

| | 1921 | 1922 | 1923 |
|-------------------------|--------|--------|-------|
| | Tons | Tons | Tons |
| U.K. imports | 15,424 | 20,171 | — |
| Ditto, January-February | 912 | 1,934 | 2,396 |

| First Quarter | 1913 | 1921 | 1922 | 1923 |
|------------------------|---------|---------|---------|---------|
| | Barrels | Barrels | Barrels | Barrels |
| London deliveries .. | 23,204 | 30,794 | 19,803 | 21,081 |
| London stocks, Mch. 31 | 36,443 | 27,363 | 13,589 | 11,722 |
| Spot price, per cwt.— | s. d. | s. d. | s. d. | s. d. |
| March 31 | 28 6 | 48 6 | 66 3 | 119 9 |

Should new crop operations in the United States be delayed, as was the case last year, this would facilitate a renewal of manipulation by interested parties now that the remainder of the surplus is more closely controlled. There is thus not much chance of consumers filling their needs more cheaply before the next crop product comes on the market in good quantities. Trade needs during the new campaign may, if anything, experience some expansion, but on the other hand, there is no gainsaying the fact that prices are very high, standing at a level which should afford producers a good margin of profit and help in stimulating operations.

New Anæsthetics

MR. CHARLES H. S. HORWITZ calls attention in "The Lancet" to the new anæsthetic "Narcylen," devised by Professor K. Gauss, Freiburg. It consists, he states, of purified acetylene and oxygen, the objectionable smell being largely masked by the addition of oil of pine. Acting upon a suggestion of Professor W. Straub that the anæsthetic properties of acetylene might prove of use in general surgery, Gauss decided to experiment with it. When administered to frogs it was found they quickly went to sleep. Straub's assistant next consented to be subjected to inhale the gas, combined with oxygen. Using a percentage of acetylene 40, oxygen 60, he became insensible to pain in less than five minutes. Gauss also successfully anæsthetised a number of his students. Narcylen was next employed upon a patient requiring a minor operation, and its use was gradually extended, so that to-day at the Diakonissen House Hospital no other general anæsthetic is employed. Up to the time of Mr. Horwitz's visit Gauss had used Narcylen in 515 cases with no catastrophes. The advantages claimed for the new anæsthetic are that induction is rapid, simple and safe, without struggling

or excitement, while recovery is equally rapid. Relaxation is not so complete as that obtained with chloroform, but is sufficient for major operations. Respiration is a trifle quicker than normal; the patients do not change colour, and appear to be in a natural sleep. The patient's temperature usually drops one degree below normal. There is little or no post-anæsthetic vomiting. In regard to what is meant by purified acetylene, it may be explained that no amount of purification can alter the objectionable odour of acetylene, but it is important to ensure that the acetylene has not been prepared at too high a temperature and that it is free from phosphoretted hydrogen, sulphuretted hydrogen, ammonia, etc. The chemical impurities can be removed by purifying agents such as bleaching powder, lime and lead chromate. Another new anæsthetic with which experiments are being conducted at the Chicago University is ethylene. The mixture employed is ethylene 90, oxygen 10. It has been tried on animals and two men with good results.

Notes on Books

A NOVEL

that has nothing to do with their craft or its members is not perhaps more interesting to chemists because it is written by a chemist, but Mr. C. H. le Bosquet's "Joppert and Son" (London: John Lane, The Bodley Head, Vigo Street, W., 7s. 6d.) does not need any adventitious aid to commend it to anyone in search of amusement, though its shabby atmosphere may recommend it especially to those whose life is lived mainly between the parlour and the till. Mr. Joppert, senior, was a saddler in a country town not far from London, and the story is that of his difficulties with his son, who had too much of his own stubbornness to conform easily to the harsh discipline of an old-fashioned apprenticeship. A blunder over the mixing of a lot of blacking brought things to a crisis, and unable to face his father with a confession of his error, Master Alfred ran away, intending to enlist in a cavalry regiment. Baulked of this intention by his deficient chest measurement, he falls into a number of adventures highly diverting to the reader, until by the happy accident of a baseless charge of complicity with a gang of coiners his errant steps are arrested and he returns perforce to his home and the saddlery business. Unfortunately for his reception by his father, he had during a brief sojourn in France become irregularly engaged to a charming girl there, and as Mr. Joppert held strongly the opinion common to rural Englishmen of his class that "them foreigners is mostly bad," the tragedy of the blacking (which, by the way, proved eventually a source of wealth) faded into insignificance. However, in novels, difficulties of this kind arise only to be overcome, and those of Alfred and Mademoiselle Yvonne are overcome accordingly, as are, also, those of his sister Emma and her *fiancé*. The story throughout belongs to the domain of light comedy, and although its scene lies apparently somewhere between Kent and cloud-cuckoo-land, in which we do not look for close verisimilitude to this work-a-day world, the characters are quite real enough for their purpose, and what happens to them does not extravagantly transcend the bounds of probability. This is a "first novel," and one of excellent promise.

The motor delivery service of Mr. W. Ellis, chemist and druggist, Ilford, formed the subject of an illustration in a recent issue of the "Daily Graphic."

NUX VOMICA SUPPLY DWINDLING.—India supplies most of the nux vomica, and two-thirds is furnished by the Madras Presidency, where, in spite of its value, the tree is not cultivated, and, according to U.S. "Commerce Reports," in certain areas has nearly vanished. In 1920-21 exports amounted to 2,268 tons, distributed as follows: United Kingdom, 1,820 tons; Ceylon, 13 tons; Belgium, 190 tons; Italy, 5 tons; United States, 737 tons. The export in 1921-22 declined to 2,010 tons, and this year's crop promises to be poor, but on the east coast is reported above the average.

Dangerous Drugs Bill

THE Dangerous Drugs and Poisons (Amendment) Bill was read a third time in the House of Commons on April 9. Mr. Sidney Webb said he was not opposing the Bill, but wished to make the position of the medical profession clear. He desired from the Home Secretary an assurance that there would not be any distinction made in the Regulations between a medical man in practice and those who have retired in regard to obtaining medicines for the service of humanity. Many of the purposes to which these poisonous drugs are or may be put are quite legitimate, even if the drugs are not necessarily to be prescribed for administration to other persons. He wished to know also why the poisonous drugs and other substances to which this Bill will apply, and in connection with which extremely rigorous penalties are to be inflicted, should be, as they are, certified in the schedule of an old Pharmacy Act of 1868. A great deal has happened in the realm of scientific discovery since that date. Even the medical profession and the British Pharmacopœia have made changes since 1868. It seems a little out of date, therefore, that we should apply these stringent penalties to a list of poisonous substances specified more than half a century ago. Does this list include anything like all the poisonous substances now known to the medical profession? Would it not be still possible, in one of the Regulations under the Bill, to draw up a revised schedule, with the advice of the Royal College of Physicians and the Royal College of Surgeons, which would be a little more in accordance with medical and chemical knowledge than could be a list drawn up in 1868? Mr. Webb also drew attention to clause 2, sub-section (1, d), where it is made an offence to

aid, abet, counsel or procure the commission in any place outside Great Britain of any offence punishable under the provisions of any corresponding law in force in that place, or to do

any act preparatory to or in furtherance of any act which if committed in Great Britain would constitute an offence against this Act.

That seems to place our law at the disposal of any other country which at any time may pass an enactment making, say, alcohol a dangerous drug. That is, perhaps, a farcical illustration. Take, for instance, laws which might be passed in Turkey or China or Japan or the United States. He did not know whether there is any precedent for enacting in advance such severe penalties for aiding, abetting and counselling the commission of any offence punishable under the provisions of any corresponding law in some other country. It seems to be opening a very wide door.

Sir Sydney Russell-Wells pointed out that the clause which distinguished between medical men in practice and retired medical men has been deleted in Committee. The schedules in the Pharmacy Act have been revised several times since they were first drawn up. The convention clause to which Mr. Webb referred has only to do with the drugs specifically mentioned in the Bill.

The Home Secretary (Mr. Bridgeman) said he is taking the usual steps to amend the Regulation which prohibits medical men not in actual practice from procuring "dangerous" drugs. In regard to the schedule of drugs, the schedule was made up under Section 2 of the original Act of 1868, and it has been brought up to date to 1908. Under Section 2 of that Act it is possible, on the advice of the Pharmaceutical Society Council, to add to the schedule. If they can convince the Privy Council that any other drugs ought to be added, they can be added under Order in Council. The other point which the hon. Member raised was on Clause 2, paragraph (d), with regard to any corresponding law in other countries. If he will look at Clause 6, Sub-section (2), he will see that the corresponding law is very fully explained. It means

any law stated in a certificate purporting to be issued by or on behalf of the Government of any country outside Great Britain to be a law providing for the control and regulation in that country of the manufacture, sale, use, export and import of drugs in accordance with the pro-

visions of the International Opium Convention signed at The Hague on the twenty-third day of January, 1912.

He thought that should provide sufficient safeguards to do away with his apprehension that any foreign country may pass a law which we shall be obliged to observe, because at any rate it has to be in accordance with the International Opium Convention.

Colonel Wedgwood hoped the Home Secretary would not go on producing Bills of this kind. The cocaine panic is got up by the stunt Press, and thereafter Parliament is compelled to listen to Bills such as this. If half as much attention were directed to preventing unemployment and destitution as we have directed towards stopping this traffic in cocaine, we might get a real solution of the social problem. These sham solutions are all very well to delude the people who do not think, but the public are beginning to look a little bit below the surface, and they will not be satisfied with a solution of the social problem which is obtained by sending to prison people who traffic in cocaine.

Mr. Clayton regretted that the concessions made to medical men and pharmaceutical chemists had not been extended to licensed wholesale drug houses. At the present time, those wholesale drug houses are lumped together with the illicit dealers in drugs and are liable to the same penalties.

Mr. Bridgeman interposed that a breach of the conditions of the licence by one of the wholesale drug houses might be as serious as any other breach under the Act.

Lieut.-Colonel Fremantle dealt with the dangers of the drug traffic. He referred to the ruin of a medical man who was a drug addict, and the difficulties of curing the habit. In regard to the reduction in the penalties for certain minor offences under the Bill, as the Bill was originally drafted, there was an extremely heavy penalty—a fine of £1,000 or penal servitude—for a series of offences including some which might quite well be classed as trivial. This was pointed out to the Home Secretary, and he has brought in an amendment. There are now two series of penalties for two series of offences. As the Bill originally stood, serious trouble might have arisen in this respect. A man through carelessness or through the fatigue that comes after the daily round of work might have failed to enter particulars in a book or to have kept some of the records required under the Bill, and for that offence might have been subject to the highest penalty. The original idea was that the magistrates in such cases would not inflict the highest penalty, but there are some things to be said about that view. One is that there are cases where even the magistrates in some out-of-the-way places might make genuine mistakes, and where a genuine grievance would arise, and the result of the genuine grievance might be that chemists and medical men would come to the conclusion that this measure involved great danger to them. They would point out that so-and-so had had no extraordinarily heavy penalty inflicted upon him for a comparatively trivial offence, and they would say, "We will have nothing more to do with it." Thus chemists and medical men would have been definitely discouraged from doing their duty in dealing with these drugs. It may be said that such cases would never arise, but such a case as the following might arise. Supposing a man were definitely a drug-taker, and committed an offence and was fined. Supposing he represented in his defence that he had only committed an offence of the trivial kind, by inadvertence and carelessness. Although the court might give its decision against him, nevertheless that man might raise a very great public agitation on the ground that he had suffered the major penalty for a minor offence, and that might have a detrimental and discouraging effect on the right and proper use of the drugs by druggists and medical men. It is a much sounder policy where there is such a very wide range of offences as is dealt with in the Bill, to have two sets of penalties for two sets of offences. The other point to which he referred was Clause 4, Sub-section (2), of the Bill, which, if enacted, will meet a very serious and long-standing trouble. Under this Clause every bottle containing medicine which includes any of these

poisons is to be labelled with the name of the poison and with particulars as regards the proportion of the poison to the whole preparation. That meets the difficulty with which we have always had to contend with regard to patent medicines. The medical profession and the chemists always insisted, in the public interest, that it was essential that patent medicines, in view of the protection which they have from the law, should be bound to show their ingredients. On the other hand, those who stand for patent medicines, and the commerce which they represent, hold that such a course is not in the interests of British trade, and that it would involve revealing trade secrets. Thus there are two conflicting claims of two conflicting public interests. This Bill meets the conflicting claims. The pill maker, or the patent medicine maker, may still put all sorts of confections and infusions into his medicines—all the frogs' livers, the flowers, the herbs, and the various other things into his mixture—without revealing the secret. But as regards a dangerous drug, he is bound to give the proportion of that dangerous drug present in the mixture. That meets our case, and, he believed, also meets the case of the proprietors of the patent medicine, and therefore it is a very remarkable instance of sound legislation meeting two opposing views in the public interest.

Dr. Chapple called attention to the ease with which this legislation is promoted and the difficulty in carrying out the Report of the Committee on Patent Medicines, because of the vested interests involved.

Sir Frederick Banbury hoped the Government would not be tempted to bring in a lot of other Bills dealing with all sorts of things about which the House knew nothing. He did not believe that this sort of Bill is going to stop the traffic altogether. He thought it would go a good way towards it and make it much more difficult for people to obtain drugs, but where a man has got the drug habit he is going to get a drug if he possibly can, and it will take a good deal of legislation to prevent it.

International Control of Narcotics

PRIOR to the adjournment of the U.S. Congress, on March 4, a joint resolution was passed by both houses calling on the President to urge the Governments of Great Britain, Persia and Turkey to limit the production of opium and the growth of the poppy, and on the Governments of the Netherlands, Peru and Bolivia to curtail the production of coca leaves. The resolution embodied the suggestion that steps should be taken by the Governments in question to fix a certain minimum production of each of these narcotic drugs, this minimum amount being that necessary to cover strictly medicinal and scientific purposes. In both houses of Congress the resolution was passed without a vote, the view being held that no time should be lost in appealing to the foreign Governments in the territories of which these habit-forming drugs originate to co-operate in effectively suppressing their illicit use. In the resolution the President is requested to report the result of his action to Congress on the first Monday in December of the present year. It is reported from Geneva that the Canadian Government has informed the Secretariat of the League of Nations that 442 lb. of morphine, 117 lb. of heroin, and 65 lb. of cocaine have recently been seized in Canada, an attempt being made to smuggle them into the country from Switzerland under the false declaration of cocoa powder. The Swiss Government is making inquiries into the matter, and it appears that the consignment in question was dispatched from Basle, and that apparently four other consignments from the same source succeeded in eluding the vigilance of the Canadian Customs officers. Recently, a recrudescence in the smuggling of narcotic drugs into and through Switzerland has been observed by the Swiss Customs authorities, several seizures having been made at the German and French frontiers, the evident intention being to smuggle the drugs purchased in Germany through Switzerland into France.

Westminster Wisdom

By the "C. and D." Parliamentary Representative

PANEL DOCTORS' TERMS

The Minister of Health stated in the House of Commons, on April 11, that before the expiry of the present agreement at the end of this year both the terms of service and the remuneration of Insurance practitioners will have to be reconsidered. The Insurance Consultative Council have already been consulted in regard to the terms of service, and will be consulted also as to the rate of remuneration. There is no other body representative of all the approved societies, but he would be prepared to receive representations from the principal groups before coming to a final decision. The total number of Insurance practitioners in England and Wales according to the latest return is 12,588. The total payments to them in 1922 amounted to approximately £6,750,000.

BRITISH INDUSTRIES FAIR

In the House of Commons, on April 9, the Parliamentary Secretary of the Overseas Trade Department stated that the total cost of the British Industries Fair, recently organised by the Department of Overseas Trade at the White City, was approximately £36,000. This amount was fully covered by the revenue obtained from letting of space to exhibitors, advertisements in catalogues, etc. The Birmingham section of the fair is not organised by the Overseas Department, and no expenditure out of public funds is involved. It is difficult to form any estimate of the amount of orders received, as exhibitors are not invited to make returns of such orders, and also because business initiated at the Fair frequently does not mature until some months later. He understood, however, that the business done this year was satisfactory, and that export orders showed a considerable increase over those for the preceding Fair.

Associations' Winter Session

London (W.).—A meeting of the Western Pharmacists' Association, jointly with the London Western Branch of the Retail Pharmacists' Union, was held at 192 Oxford Street, W., on April 11, the President (Mr. W. E. D. Shirtliff) in the chair. A strong appeal was made by the President for support for Mr. A. R. Melnish in the coming Pharmaceutical Society's Council election, and further contributions to the funds of the next Pharmaceutical Conference were also solicited. The rest of the proceedings, which were private, consisted of an address by Mr. G. A. Mallinson, secretary of the Retail Pharmacists' Union, on *Dispensing Errors*, followed by a discussion in which several members took part. A cordial vote of thanks was accorded to Mr. Mallinson.

Redhill.—The Reigate and Redhill Pharmacists' Association and local branch of the Pharmaceutical Society held a joint meeting at the Warwick Hotel, Redhill, on March 14, when a paper was read by Mr. T. P. Padwick, of Redhill, entitled, *Pottering about Surrey with a Camera*. Members and friends numbered about sixty. The President of the Association, Mr. H. Hocken, occupied the chair. Mr. Padwick prefaced his remarks with a brief description of the geological arrangement of the county. He showed how different soils gave rise to different kinds of vegetation, and also that they had the effect of producing different results of growth on members of the same species. He then proceeded to describe some of the more picturesque of the high roads and byways of Surrey, and included in his survey some charming studies of river and woodland scenery. In drawing the attention of his hearers to some typical beauty spots, Mr. Padwick alluded to the devastating effect that had been produced on some of these as a result of the Great War, and also referred to the gradual disappearance of the "country" as such. At the close the chairman thanked Mr. Padwick for his interesting paper.

Festivities

A Liverpool Smoking Concert

THE smoking concert of the Liverpool Chemists' Association in aid of the Benevolent Fund of the Pharmaceutical Society attracted a large gathering to the Adelphi Hotel on April 11. An excellent programme was presented. Mr. A. W. Ashcroft, President of the Association, was in the chair. Mr. A. R. Melhuish, a member of the Pharmaceutical Society Council, appealed for the Benevolent Fund, which, he said, has forty-nine annuitants, some over ninety years of age. The founders were wise in placing benevolence as one of their primary objects. This was his own first visit to Liverpool, and was due to the invitation of that Archdruid of Benevolence, Mr. Moreton Warry. Liverpool had an enviable reputation as a supporter of the fund, which was administered with sympathy and at a cost of one-half per cent. for management. Last year's subscriptions fell off by £600, and, considering this fact, together with the increased cost of living, he must (like Oliver Twist) ask for more. Without, in the words of Robert Louis Stevenson, making a brutal assault upon their feelings, he would ask all to give that little more which meant so much in the total. (Loud applause.) Upwards of £100 was collected.

Complimentary Dinner to Mr. W. J. Williams

A SIGNAL success attended the complimentary dinner given at the Exchange Station Hotel, Liverpool, by the pharmacists of Liverpool and district to Mr. W. J. Williams, A.C.I.S., chemist and druggist, and Mrs. Williams, on April 5, the eve of their departure to London. Mr. John Jones presided, the company numbering about 100. Mr. W. J. Talintyre gave a recital on the grand pianoforte during the reception, and the Jackson male voice quartet sang part-songs. Cordial messages were read by Mr. Harold Wyatt from the Mayor of Scarborough (Mr. George Whitfield), Dr. Charles Symes, Mr. H. Humphreys Jones, Mr. R. R. Bennett, B.Sc., Mr. C. H. Hampshire, B.Sc., R. Sumner & Co., Ltd., Mr. Harold Barton (Southport), Mr. F. A. Spear (secretary, Plymouth Pharmaceutical Association), Mr. William Kirkby, M.Sc. (Manchester), Mr. George Redford (Liverpool). Acknowledgment of the abilities of Mr. Williams and the services of Mr. and Mrs. Williams during the Pharmaceutical Conference at Liverpool in 1920 was coupled with congratulations and wishes for their future welfare. Mr. Burton W. Eills (ex-Lord Mayor of Liverpool, who was the first employer of Mr. Williams) was prevented from attending at the last

individual to be introduced to the other, and at the end of which each knew that he would not meet the rest again until about the same date a year hence. Now he would like to forget drugs and packed goods, and regard the social advance which had brought so many friends together this evening. From Mr. Righton (Southport) he had the pleasure to take a first order forty-eight years ago, and one from Mr. Lloyd (Garston) forty-nine years since. He concluded with an interesting illustration of the friendship existent to-day between wholesalers and retailers. Mr. Henry Peet proposed the toast of the evening, "Mr. and Mrs. W. J. Williams," and ascribed the honour of his selection as speaker to the fact that he was one of the oldest pharmacists in Liverpool. Mr.



Photo]

[Cleworth.

Williams had several claims to distinction. In the first place he was a fully qualified pharmacist. Then Mr. Williams was born with a mathematical head. He could convince the most unbending income-tax assessor that a pharmacist was paying twice as much as he ought to pay. The British Pharmaceutical Conference held at Liverpool in 1920 was recognised as one of the most successful of the series, and its success was due in a great measure to the assiduity, skill and self-sacrifice of Mr. Williams. Mr. F. C. Cooling (Birkenhead) supported the toast, and Dr. H. H. Marsden, speaking as a very old friend of Mr. Williams, said he was sorry to lose sight of him. Mr. R. G. Govier (Wallasey) had pleasure in adding to the tributes paid to Mr. Williams. In their joint capacity as officials of a Merseyside organisation he had found Mr. Williams an indefatigable and optimistic organiser, one who would not brook defeat. Mr. J. Righton (Southport) said the Welsh motor tour for the Conference which Mr. Williams engineered gave him the longest day of his life in the open air. Southport was not one whit behind the rest of West Lancashire and Cheshire in appreciation of Mr. Williams. In the absence of Mr. G. H. Cole (Blundellsands) Mr. Cleworth (Manchester) also testified to his appreciation of the Conference work of Mr. Williams. Mrs. Ashcroft, on being called upon to speak for the ladies, said nothing was too much trouble for Mr. Williams when asked by the ladies' committee at the Liverpool Conference to assist them in any difficulty. Mrs. Williams had been a great helper at the Christmas parties for the children of pharmacists. It was to be hoped that Mrs. Williams would get among the women workers in London, who would appreciate her as Liverpool had done and find her a charming lady. (Applause.) The song, "Pill Simplex," written by Mr. F. A. Spear, preceded the response. Mr. Williams, who was deeply affected by his reception, acknowledged the toast on behalf of his wife and himself. Having thanked the various speakers, he hoped he might be permitted to refer to Dr. H. H. Marsden, who taught him pharmacy, and to thank him publicly for all he had done for his benefit. He was instructed by Mrs. Williams to say that she might be relied upon for her customary help at the children's



MR. W. J. WILLIAMS, A.C.I.S.



MRS. WILLIAMS

moment and sent a message of appreciation. "The Wholesale Drug Trade" was submitted by Mr. Wallbridge, and Mr. W. H. Saunders, on behalf of the various wholesale firms represented, responded. Glancing at a comparison of the wholesalers of forty to forty-five years ago and to-day, he said that no longer were stolid annual dinners held at which it was necessary for each

Christmas party in at least the next few years. This night would stand out as one never to be forgotten. He personally thanked all the committee and the hon. secretaries (Mr. and Mrs. A. J. Ferriday). Mr. T. Edward Lescher, in proposing "The Retail Trade," said he was almost a stranger in Liverpool, whither he had come from London, which Mr. Williams, like Dick Whittington, had chosen in search of fame and fortune. He congratulated the North on its oratory, and opined that Liverpool had the advantage of hearing American after-dinner speakers. Mr. W. H. Saunders had shone as a guide, philosopher and friend of the young. (Applause.) Mr. Harold Wyatt, J.P., replied. He rejoiced that the Liverpool Chemists' Association had advanced socially and generally, and he paid in humorous terms a tribute to Mr. John H. Robinson's dynamic action which had brought down upon his head a mixed shower of compliments and "cursory" remarks. To the men who were wont to ask: "What has the Pharmaceutical Society done for us?" the obvious reply was: "What have you done for the Society?" In commending the ladies' committee and Mr. J. L. Hirst for the suggestion of the children's parties, he said the effect on the Association had been excellent. Mrs. Ashcroft had proved herself a remarkable leader of women. Regarding pharmacy, he was sufficient of an optimist to believe that their good times did not lie entirely behind them. (Applause.) Mr. W. H. Clubb, having expressed his best wishes to Mr. and Mrs. Williams, proposed "The Visitors." As he had been designated "William the Silent," he would not swell his tabloid to the size of a horse ball, but submit an always popular toast, coupled with the names of Mr. E. H. Simmons (President, Manchester Pharmaceutical Association), Mr. A. H. Messenger (Southport), Mr. Cecil Owen, B.Sc. (Chester), Mr. C. Wherly (Wallasey), Mr. Cooling (Birkenhead), and Mr. C. Tannington. Mr. Simmons spoke of Liverpool as his "alma mater" in the days of Mr. Cowley, and said there was something invigorating about Liverpool life. Not a few Manchester men would like to see something like the present gathering in their own city. Mr. Tannington recalled the time when he was running a drug business with Mr. Williams on the staff. He had thought of calling on Mr. Williams to follow him from drugs to accountancy, for he was probably as good an accountant as any in Liverpool. Mr. A. W. Ashcroft submitted "The Chairman and Committee," who had organised the dinner. Thanks to their enormous amount of work the company had had an enjoyable time. If this dinner was to be any criterion of his success in London, Mr. Williams was going to have a successful time, and was it not the provincials who made London? In a brief reply, the chairman, who spoke on the stroke of eleven o'clock, reminded the pharmacists of (1) the candidature of Mr. Simmons for the Pharmaceutical Council, and (2) of the smoking concert six days ahead at the Adelphi Hotel. "Auld Lang Syne" followed.

DISCRIMINATION IN WATER RATES.—Douglas (Isle of Man) Town Council has adopted amended charges for water for chemists and druggists, who are to pay 15s. per annum in addition to the ordinary rate. Chemists developing films are also to pay the additional charge made for photographers, £3 per annum.

U.S. PURCHASES OF FOREIGN CHEMICALS INCREASING.—Imports into the United States for the eleven months from January 1 to November 30, 1922, of chemicals and allied products had an aggregate value of \$93,070,171, an increase of 24 per cent. over the corresponding period of 1921, whereas the value (\$97,215,547) of domestic exports for the same months showed an increase of but 1 per cent. over the preceding year. The rate of increase of these imports ran as follows:—Coal-tar chemicals, 1.84 per cent.; medicinal and pharmaceutical preparations, 17.78 per cent.; other chemicals, 3.08 per cent.; fertilisers, 41.94 per cent.; miscellaneous chemical products, 44.49 per cent.; explosives, 46.62 per cent. During the period September 22 to November 30, 1922, in the class of "coal-tar colours, dyes, stains, colour acids, and colour bases," Germany supplied 188,335 lb., worth \$229,785; Switzerland, 240,923 lb., valued at \$333,469; United Kingdom, 14,540 lb., valued at \$14,682.

Pharmaceutical Society of Great Britain

Examination Results

THE following are the results of the Pharmaceutical Society's examinations held in Edinburgh this month:—

Major Examination

Two candidates were examined; the following passed: Reid, John Bernard, St. Andrews.

Qualifying Examination

| | No. | PART I. | | | PART II. | | |
|---|-----|---------|----------|--------|----------|----------|--------|
| | | Absent | Referred | Passed | Absent | Referred | Passed |
| Entered for whole Examination .. | 45 | 5 | 20 | 8 | 3 | 1 | 2 |
| Entered for Part II. and referred subject in Part I. .. | 15 | — | 8 | 7 | — | — | 4 |
| Entered for Part I. only .. | 115 | 2 | 25 | 64 | — | — | — |
| Referred subject in Part I. only .. | 7 | — | 2 | 5 | — | — | — |
| Entered for Part II. only .. | 31 | — | — | — | 3 | 14 | 11 |
| Referred subject in Part II. .. | 24 | — | — | — | 1 | 7 | 25 |
| | 247 | 7 | 55 | 84 | 7 | 22 | 42 |

Referred in one subject: Botany, 10; chemistry, 36; physics, 9; materia medica, 2; pharmacy, 20; total, 77.

PARTS I. AND II.

The following, having satisfied the examiners in Parts I. and II., have been registered as chemists and druggists:—

| | |
|-------------------------|-----------------------------|
| Bell, James, Cambuslang | Garcia, I. I. G., Lumphin- |
| Chapman, J. P., Kilsyth | nans |
| Dunsire, Thomas, Edin- | Macdonald, P. E., Glasgow |
| burgh | Whiteford, C. Greenshields, |
| | Paisley |

PART II.

The following, having satisfied the examiners in Part II., have been registered as chemists and druggists:—

| | |
|-----------------------------|-----------------------------|
| Anderson, Christina Baldie, | Love, M., Edinburgh |
| Leslie, Fife | McIvor, I. S., Eyemouth |
| Ashworth, S. C., Liverpool | Macmaster, W. C., Glasgow |
| Beck, Hugh, Johnstone | McPhee, E., Forfar |
| Binnie, W. H., Larbert | Masson, W., Glasgow |
| Bradley, J. E., Houghton | Mayson, J. R., Keswick |
| Lane | Midgley, W., Bradford |
| Burgess, Dorothy, Henley, | Nelson, T. C., Edinburgh |
| Huddersfield | Quayle, J. M., Douglas, |
| Chew, Augustine, Black- | I.O.M. |
| burn | Robertson, A. D., Pitlochry |
| Coats, C. C., Leith | Royston, J. H., Barnsley |
| Connelly, J., Leven | Smith, R., Glasgow |
| Cowie, W. J., Birkenhead | Stock, J. R., Bradford |
| Cummins, E., Whitby | Storrie, J. B., Edinburgh |
| Daley, P., Bishop Auckland | Turner, A., Dewsbury |
| Farthing, G. D., Liverpool | Walker, Gabriel, Neilston |
| Fowler, W., Longton | Wanless, C. U., Manchester |
| Hughes, W. D., Carnarvon | Warburton, A. N., Man- |
| Hutcheon, Mary C. G., | chester |
| Aberdeen | Woodruff, Lynn, Barnsley |
| Iley, A. J., Gateshead | |

Branch Meetings

Bromley.—The West Kent (Bromley) Branch held a meeting on April 10, at which Mr. Hildreth Glyn-Jones, barrister-at-law, lectured on *The Law Affecting the Sale of Poisons and Poisonous Substances*. After giving a résumé of the Pharmacy Acts, the speaker said our title pharmaceutical chemist or chemist and druggist is really the hall mark of our fitness to sell poisons, and

regarded by the public as the hall mark of our fitness to keep a chemist's shop. The Act of 1908 provided the distinctive title, pharmacist. As regards the Dangerous Drugs Act, this, of course, was the result of an International Conference, and intended to suppress illicit use of certain drugs. It was an ill-conceived piece of legislation, and presented various difficulties to the chemist in business; but, after all, the main idea of the Act was the public interest. There were several special amendments at present under consideration. Whether they would become law remained to be seen. Mr. Glyn-Jones gave various interesting details respecting the supply of medicines of the D.D.A. type to medical men, also advised members respecting Insurance dispensing and the filing of scripts. Horticultural poisons were also touched upon, and members were reassured that stringent regulations had still to be observed by seedsmen and other dealers outside pharmacy.

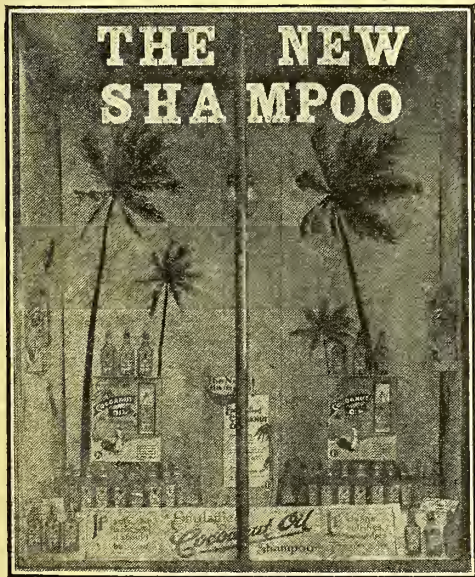
Huddersfield.—A meeting of members and student associates of the Pharmaceutical Society in the Huddersfield area was held on March 27, Mr. J. W. B. Johnson (President of the Huddersfield Chemists' Association) in the chair. Mr. Antcliffe, of the Pharmaceutical Council, gave an account of the activities of the Society. A branch of the Pharmaceutical Society was afterwards formed, "The Huddersfield and District Branch of the Pharmaceutical Society." Mr. R. Sykes was appointed secretary and treasurer *pro tem*.

Chemists' Windows

Photographs of windows sent to the Editor for reproduction should be accompanied by a note on how the displays were arranged.

A Coconut-oil Shampoo Show

This window, arranged by Mr. H. A. Martin, Leicester, by creating the right atmosphere made an ordinary into an extraordinary display. The background and sides were of white paper, the palm trees being copied out of a child's book and painted with Indian ink. Two tall stands upon which were placed three



bottles of coconut-oil shampoo had attached to them two showcards, while a row of bottles in crescent form covered the base of each stand. Between the stands was another showcard bearing a piece of coconut. The centre paper strip at the bottom of the window with three bottles of shampoo on either side completed the display, with the exception of the white cut-out letters attached to window glass at top.

An Appropriate Display

The following photograph is one of a window show arranged by J. Phillips & Son, chemists, Newport, Mon.,



at the height of the interest in the discoveries in Egypt. The display not only aroused considerable interest locally, but materially increased the sales of Lobelline.

An Effective Arrangement

The following is a photograph of another window show by Mr. H. A. Martin, Leicester. It comprises a paper strip attached to the window at the top; two oval cards suspended underneath in the rear; a silent salesman outer placed on a stand in centre, to which are attached the arrows inscribed "Ladies only," and "Please note,"



and pointing to suitable matter as to how the tablets act; a showcard placed in front of the stand having arrows (cut-out board) pointing to the goods; two more silent salesmen with a group of bottles arranged in tiers in front; and a paper strip, "Sulphaloids remove unsightly blemishes," attached to a board at the base. The background was a violet velveteen curtain, which gave the display a rich finish.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts.

ENGLAND AND WALES

Local Reports

Blackburn.—At a meeting of the Lancashire Pricing Bureau on April 6, it was reported that in 1922 1,401,701 prescriptions were dispensed at a cost of £51,506 5s. 6d. (£22,502 5s. for ingredient prices and £29,004 0s. 6d. dispensing fees). The average ingredient price and dispensing fee per prescription were 3.85d. and 4.97d. For 1921 there were 1,189,387 prescriptions and an average total cost per prescription of 9.57d. (against 8.82d. last year).

Blackpool.—The Medical Benefit Committee has passed a resolution expressing the opinion that the furnishing of particulars by the Pricing Bureau regarding prescribing by panel doctors in excess of the "real average," has the tendency of unduly restricting panel practitioners in their choice of medicines for insured persons.

Burnley.—At a meeting of the Insurance Committee, on April 6, a suggestion from the Ministry of Health that unless white bandages are specifically prescribed grey ones should be supplied, was objected to by several members, including the representative of the chemists, who said this would revive the allegation that panel patients do not receive so good a service as private patients. His colleagues might refuse to supply grey bandages, particularly as the difference in price was so small. He hoped the Committee would support them if they did so. The chairman suggested a resolution of protest against the proposal, together with a request that no distinction be made in the colour of bandages for insured persons. The clerk said the Lancashire Prescriptions Bureau intended to do the same.

Hull.—At a meeting of the Insurance Committee on April 4, a report of the Panel Committee was submitted on alleged excessive prescribing, in which it was stated that in some cases the high cost of prescriptions was due to circumstances over which the doctor has practically no control. In others, the prescribing of medicines or preparations of high cost has been due to inadvertence, ignorance of rules, and perhaps to carelessness. The too frequent ordering of mixtures has been satisfactorily explained. In all cases, any errors committed would be in the favour of the patient. The doctors concerned have been warned as to their future conduct. No action will be taken. The report of the investigations of a complaint by a panel practitioner against a firm of chemists was brought forward by the Pharmaceutical Service Sub-Committee. The Sub-Committee found that the quantity of liniment supplied was not more than 2 oz., while 4 oz. was ordered. The firm of chemists had been paid for 4 oz. of liniment prescribed. As the evidence did not establish that a wilful error had been made, the Sub-committee recommended that the firm of chemists be urged to exercise greater care in the future, and that no further action be taken.

Sheffield.—At a meeting of the Insurance Committee recently payments were ordered to be made to chemists of £1,439 19s. 3d. and £200 as a refund for amounts deducted over and in excess of the amount required for the Pharmaceutical Committee's expenses. A report was presented from the Ministry of Health regarding the Insurance Committee's recommendations with respect to certain chemists whose dispensing of drugs and supplies of appliances were considered to be unsatisfactory. The Insurance Committee were represented, and stated that their object was not to ask for heavy penalties, but primarily to secure accurate dispensing. The Minister has decided to withhold the following sums: Case (1) cautioned, £2; (2) cautioned, £1; (3) cautioned, £1; (4) censured and fined 10s. 6d., nil; (5) censured and fined £2 2s., £2; (6) cautioned, £1; (7) cautioned and fined 10s. 6d., £2; (8) cautioned, £1; (9) censured and fined 10s. 6d., £1; (10) censured and fined 10s. 6d., £1. A firm of chemists appealed against the decision of the Committee, and while the methods of testing the pre-

scriptions were questioned, the Ministry dismissed the appeal and withheld a sum of £1 from the grant, allowing £5 towards the Committee's expenses. On the motion of Mr. J. T. Appleton, it was decided to send the suggestions of the Minister with regard to taking certain precautions in future tests to the sub-committee appointed for considering matters arising out of the analyses and examination of prescriptions.

Smethwick.—At a meeting of the Insurance Committee recently the Benefits Sub-Committee reported that four further tests had been made of medicines from chemists, particulars of the analyst's report to be submitted later. An insured person who asked if salvarsan treatment may be received as part of medical benefit was informed that Insurance practitioners are not required to render such treatment, which is obtainable at the hospital. A complaint was made by an insured person that when presenting a prescription for dispensing she was asked by the chemist's assistant what was the nature of her ailment. A representative of the firm has expressed regret, and stated that the prescription in question was apparently inaccurate, and that the assistant desired to confirm his reading of the prescription as to the doctor's intention in prescribing. The clerk stated that the prescription was incorrectly written. The firm was informed that the assistant should have referred the person back to the doctor. The following information was received from the pricing office:—

| | Sept.-Dec. | Year, 1922 |
|--------------------------------|----------------|-----------------|
| Cost of ingredients .. | £329 16s. 2d. | £1,377 12s. 7d. |
| Cost of dispensing fees | £516 10s. 10d. | £2,300 7s. 4d. |
| Number of prescriptions | 27,364 | 111,090 |
| Av. cost of ingredients | 2.9d. | 3.0d. |
| Av. cost of dispensing fees .. | 4.5d. | 5.0d. |

Payments to chemists, January account, amounted to £332 5s. 7d.

Wiltshire.—A meeting of the Pharmaceutical Committee was held at Trowbridge on March 21, Mr. R. T. Christopher (Bradford-on-Avon) in the chair. The secretary reported that in spite of the Committee's opposition it had been decided to put the South-Western Formulary into force for twelve months. The annual report was presented, showing that the total paid to panel chemists for 1922 was £5,273 11s. 2d., an increase of £292 17s. over 1921. The administrative expenses of the Committee were 1.32 per cent., against 1.8 per cent. in 1921. The B.P.C. Supplement, 1922, for dressings was adopted.

SCOTLAND

Fife.—A letter has been submitted to the Medical Benefit Committee from the Scottish Board of Health to the effect that in view of the financial position, and of the continuance of prescribing by many of the doctors showing a high cost per person on their lists, they proposed to make a full analysis of the prescribing methods of twenty doctors during 1922. If the result appeared to warrant it, the Panel Committee and the Insurance Committee would co-operate in taking such action as would effectively prevent for the future undue calls on the drug fund. There was also submitted a letter from the secretary of the Panel Committee agreeing to the Board's suggestion. The Medical Benefit Sub-Committee also considered letters from the secretary to the Fife Panel Committee, intimating the withdrawal of that Committee's consent to the circular letter issued by the Insurance Committee on July 15, 1921, to panel practitioners and chemists on the subject of disallowed prescription forms, requesting that this circular letter be withdrawn. After a discussion, it was resolved that the clerk intimate to the secretary of the Pharmaceutical Committee the desire of the Panel Committee for a joint conference; that the Insurance Committee meantime adhere to the terms of the circular letter referred to, and take no part in the proposed joint conference; and that the matter be remitted back to this Sub-Committee with power to consider, and, if so advised, act on suggestions. These minutes were approved at a meeting of the Insurance Committee on March 31.

Society of Chemical Industry

At the meeting of the London Section of the Society of Chemical Industry, held at the Engineers' Club, Coventry Street, London, on April 9, Mr. E. V. Evans, chairman of the section, presiding, two papers were read and discussed. One was entitled *The Cod-Liver Oil Industry of Newfoundland*, by Drs. S. S.-Zilva and J. C. Drummond. Dr. Zilva said the paper related to a part of a detailed inquiry into the cod-liver oil industry from the biological point of view. The work upon which the authors had been engaged was the elaboration of a method for the estimation of the vitamin content of cod-liver oil, it having been found that cod-liver oil was about 250 times as potent as an average sample of butter. One of the problems in hand was to discover why substances like butter or animal tissues, which also contained vitamin A, were not as active therapeutically as cod-liver oil. In pursuance of their own contention that the high potency of cod-liver oil was the reason for its greater therapeutic efficacy, it became necessary to investigate both the method of manufacture and the conditions under which the manufacture of cod-liver oil took place in Norway and in Newfoundland, these being the two most important places where cod-liver oil was manufactured. The object of the present paper was to give some account of the Newfoundland cod-liver oil industry in comparison with the Norwegian industry. The author explained how, with the Norwegian product, the oil was not always pure cod-liver oil, but was obtained from mixed catches of fish, whereas in the case of the Newfoundland industry, all the fish was cod, and the oil was, therefore, pure cod-liver oil. The cod-liver oil industry in Newfoundland was started in the early forties; in 1888 the first refining process, and in 1903 the direct steam process were introduced. In 1916, by an Act of the Newfoundland Legislature, the cod-liver oil industry came under Government control. There were three main methods of producing cod-liver oil. The first is the old rotting process—now seldom used—in which the livers are allowed to rot and the oil rises to the surface; the second is the jacketed method, which consists in steaming the liver in jacketed apparatus until the oil rises to the surface; and the third is the direct steam method, in which steam is blown into the liver, breaking up the tissue, the oil rising to the surface. The last method is the one mainly employed in Newfoundland now, and it was the author's object to investigate whether it had a deleterious effect upon the vitamin potency of the oil. The regulations for preparing oil by this method provided that the oil must be steamed until a scum was formed; then it was decanted, filtered and stored in a tank for 24 hours, and then filtered again and casked. Many samples of oil were taken and tested out biologically in the laboratory in London. For the purpose of testing the vitamin potency rats were used, doses of 1.6 milligrams being given to the rats and their growth recorded. Testing samples of oil made by the jacketed process, and the direct steam process in this way, it was found that there was no difference in the vitamin potency, thus showing that the direct steam method was as good as the older method practised mainly by the Norwegians. Tests were also made of what was known as the second fraction, *i.e.*, the first fraction was decanted and used for medicinal purposes, after which the second fraction, known in Newfoundland as common cod-liver oil, was obtained, which was not used for medicinal purposes. It was found that the vitamin potency of this second fraction was almost as good as that of the first fraction, and considering the hygienic conditions under which the oil was prepared, it seemed a pity that this fraction should only be used for industrial purposes, since it would be quite good for medicinal uses and for agricultural purposes, such as feeding cattle, etc. The next point was the refining. In this process the oil was chilled to cause separation of the stearin, yielding an oil which does not become turbid when stored in a cool place. The apparatus required for refining cod-liver oil was much more expensive than that required for the steaming process, and there were only a few refineries in Newfoundland. A further point investigated was whether fish from various parts of the Newfoundland coast possessed different vitamin potencies, as had been suggested. It

had been proved that the fish did vary anatomically according to the place where they were caught, but investigations showed that the oil produced from the livers of these various fish did not differ in vitamin potency. It had been found that the minimum dose of Newfoundland cod-liver oil necessary to promote growth in rats was from 1.2 to 1.6 milligrams, and there was a great uniformity of potency in the Newfoundland fish. With the well-known Lofoten cod-liver oil from Norway, which was from pure cod and not from mixed catches, the minimum dose was found to be 5 milligrams, and from the fish caught on the northern coast of Norway there was a great variation in the potency owing to the fact that the catches were often very mixed. There was little doubt that the high activity of the Newfoundland oil was characteristic of the fish of that part of the world, and this fact, coupled with the very hygienic conditions under which the oil was produced, should place it very high on the market.

Discussion

Captain Gordon, Deputy High Commissioner for Newfoundland, who opened the discussion, said that Newfoundland exported about 200,000 gallons of cod-liver oil, of which 40,000 gallons went to the United Kingdom, but at the present time Norway exported five times more cod-liver oil to this country than Newfoundland, which was a surprising condition of things having regard to what the authors of the paper had said. He was sure the desire was deep-rooted in all of us to develop trade within the Empire, but he could not understand why there should be this preference for the Norwegian oil suggested by the importation figures.

Dr. J. C. Drummond, co-author of the paper, said the idea seemed to be strongly held, especially by the medical profession, that only the oil coming from Norway was of any value. There was now a large amount of evidence that the Newfoundland catches were pure cod and not, as in the case of some of the northern Norwegian catches, mixed fish, and, therefore, the Newfoundland oil must have a higher therapeutic value. With regard to refining, the authors had been very much impressed during their visit to Norway last year, with the fact that in separating the stearin, a large amount of vitamin was also removed. This stearin was only used for industrial purposes, but although it was not as potent as the original oil, it was far more potent in most cases than the equivalent weight of butter, and it seemed surprising that such a valuable product should be turned over solely to technical uses. He even wondered why the stearin was taken out of the oil at all. It was an expensive process, and he asked whether the desire to have a perfectly clear oil was sufficiently strong to justify it.

Mr. Brewis referred to an early experience of his in this country in which steam was blown into the livers very much in the same way as described by the authors of the paper. He had also been informed that the process had been used years before. The oil in that case was of a light brown colour, and it had a considerable sale, being regarded as more active.

Dr. J. Reilley called attention to the fact that the direct steam process in Newfoundland was carried out in open pans, whereas in Norway closed pans were used. Did that have any effect? As to the darker coloured oil, there were some emulsions on the market containing cod-liver oil with lime salts, and in such cases there would be no need to have the clear oil, and the higher vitamin content of the slightly brown oils would then have an advantage.

Mr. D. M. Freeland inquired as to the percentage of stearin present in cod-liver oil.

Dr. Zilva, replying to the questions raised, said that the use of open vessels for the direct steam process in Newfoundland did not make any difference to the final product. As to colour, he did not think there was any reason for assuming that much loss in potency occurred in refining. The amount of stearin extracted amounted to from 2 to 3 per cent.

CHINESE LIQUORICE ROOT is abundantly produced in the Tao River regions of Inner Mongolia and the districts of Pingchuan and Chaoyang of Jehol Special Area, where the agents of foreign firms have been purchasing their needs. For the last three or four years, Japanese merchants have realised large profits.

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42, Cannon Street, E.C.4, April 12

BUSINESS has not developed in the manner anticipated now that the Easter holidays are over, and, so far as Mincing Lane produce is concerned dull trading conditions have prevailed; a variety of excuses is given, the imminence of the Budget and reports of labour unrest being the most prominent. At the moment there is no incentive to buy otherwise than from hand-to-mouth. In the pharmaceutical chemicals group, a better demand is noted for citric and tartaric acids at firmer prices. Acetanilide and barbitone are held for higher prices, the latter being scarce. Bromides have a decidedly firmer undertone, and quite a number of orders have been executed for consumption and stock by dealers; other chemicals showing firm to dearer rates are sodium salicylate, salol, phenacetin, phenazone, hydroquinone, and B.P., potassium, permanganate. These products should be carefully watched by retail buyers, as the effect of the cessation of German supplies is gradually becoming more marked. Among industrial chemicals acetic acid is in short supply; bleaching power is tending dearer; cream of tartar is firm, in good demand, and tending higher. Lithopone is dearer, and oxalic acid is easier; commercial potash permanganate is higher, and sodium prussiate is easier. Carbolic acid crystals are still very scarce. In fixed oils, the advance in turpentine and linseed are the most important features; castor is £2 dearer; there is a good export demand for certain fixed oils. Wood oil is firm and dearer. Other changes comprise a weaker feeling in menthol and mercury. Shellac is irregular but rather lower. Chamomiles are very scarce, and senega is on the easier side; refined camphor slabs are easier. Turmeric is dearer.

| Higher | Firmer | Easier | Lower |
|-------------------|--------------------------------|------------------|------------|
| Barbitone | Bromides | Anise oil (star) | Almond oil |
| Castor oil (Hull) | Citric acid | Benzyl acetate | (essent.) |
| Linseed oil | Citronella oil | Benzyl alcohol | Cubeb oil |
| Lithopone | (J.V.) | Benzyl | Saltpetre |
| Turmeric | Cloves (Zan.) | benzoate | (English) |
| Naphthalene | Coconut oil | Camphor | Shellac |
| Turpentine | Coumarin | (Jp. slabs) | |
| Wood oil (China) | Lime oil (hand-pressed) (W.I.) | Citronella oil | |
| Wormseed oil | Mint oil (Jp.) | (Cey.) | |
| (c.i.f.) | Potash | Fenugreek seed | |
| | permang. | Hempseed | |
| | Salol | Lemongrass oil | |
| | Soya bean oil | (c.i.f.) | |
| | Tartaric acid | Leptandrin | |
| | Terpineol | Menthol | |
| | | Mercury | |
| | | Naphtha | |
| | | Oxalic acid | |
| | | Sodium | |
| | | prussiate | |
| | | Spike oil (Sp.) | |

Cablegrams

NEW YORK, APRIL 11.—Business is quiet. Menthol has declined to \$8.00 per lb. Curaçao aloes is also lower at 8c.; Mexican sarsaparilla has declined to 26c. per lb., and taraxaco root to 14½c. Oregon balsam of fir is dearer at \$3.50 per U.S. gallon.

BERGEN, APRIL 11.—The total catch of cod for the whole of Norway since the opening of the season amounts to 30,100,000, against 25,900,000 for the corresponding week of last year, and the yield of steam-refined medicinal oil is 58,158 hectolitres, against 48,045 hectolitres for the same period of 1922. Price of finest new medicinal steam-refined oil of 1923 crop is firm at about 90s. to 92s. per barrel, c.i.f. London.

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday:—

| | Par value | April 4 | April 11 |
|--------------------------|-----------|-----------------|-----------------|
| Amsterdam, chqs. fl. | 12.107 | 11.87½—11.87½ | 11.89½—11.89½ |
| Berlin .. marks | 20.43 | 98,000—99,000 | 97,500—98,500 |
| Brussels, chqs. ... fr. | 25.22½ | 83.10—83.20 | 80.90—81.00 |
| Calcutta, rup. ... 2s. | | 16½d.—16½d. | 16½d.—16½d. |
| Constantinople pstrs. | 110 | 685—715* | 680—710* |
| Greece .. drch. | 25.22½ | 390—400 | 390—400 |
| Italy, sight .. lire | 25.22½ | 93½—93½ | 93½—93½ |
| Lisbon, sight escudo | 53½d. | 2½d.—2½d. | 2½d.—2½d. |
| Madrid, sight pes. | 25.22½ | 30.48—30.51 | 30.40—30.43 |
| Montreal, cable. \$ | 4.86½ | 4.75—4.75½ | 4.75—4.75½ |
| New York, cable \$ | 4.86½ | 4.66½—4.67 | 4.66½—4.66½ |
| Paris, chqs. ... fr. | 25.22½ | 71.55—71.65 | 69.80—69.90 |
| Singapore .. t.t. dollar | | 28½d.—28½d. | 28½d.—28½d. |
| Switzerland .. fr. | 25.22½ | 25.32—25.35 | 25.50—25.53 |
| Vienna .. kr. | 24.02 | 320,000—340,000 | 320,000—345,000 |
| Yokohama, T.T. yen | 24.58d. | 24½d.—25d. | 25½d.—25½d. |

* Nominal.

Crude Drugs, etc.

AGAR-AGAR.—The spot value of Kobé No. 1 is about 5s. 3d. per lb., but arrival prices are firmer at 4s. 6d. c.i.f. for afloat or near at hand.

ALBUMEN.—Prime Chinese egg is slightly easier, offering at 3s. 1d. per lb. on the spot.

ANTIMONY.—The tendency in the United States is very firm, due to some of the dealers there having been caught rather short, and thus forced to make inquiries on this side for foreign metal, which is getting scarce. Its current value on the spot is about £23 per ton ex stock. English refined is also difficult to buy, being in very limited supply, although nominally unchanged.

ARECA.—Ceylon on the spot offer at 37s. 6d. per cwt. An arrival of about 50 bags has taken place.

BALSAMS.—The following are current spot quotations:—Tolu, 3s. 9d. per lb.; Peru, 6s. 9d. to 7s. 3d. as to sellers; Canada, 6s. 6d.; Capaiba, filtered Maranham, in cases, 2s. 1d.; Para, 1s. 8d.; Oregon balsam of fir, 11d. per lb.

CADMIUM.—There is a moderate demand either for Continental or American, current quotations being about 5s. 3d. to 5s. 6d. per lb.

CAMPHOR (REFINED).—Japanese 2½-lb. slabs are easier at 3s. 6d. per lb. on the spot, and to arrive, April-May shipment is quoted at 3s. 4½d. per lb. c.i.f.; ¼-oz. tablets are slightly easier, offering at 4s. 4d. to 4s. 5d. per lb.

CARDAMOMS.—An auction of 50 cases Ceylon will be held to-day at a broker's saleroom.

CASCARA SAGRADA is quiet at from 77s. 6d. to 80s. per cwt. for three- to four-year-old and 70s. to 75s. for one- to two-year-old. Arrivals of 1,664 bales have taken place from the Pacific coast.

CHAMOMILES.—Stocks in Belgium appear to be getting exhausted, judging by inquiries as to price. Spot value of fair white flowers is about 500s. per cwt.

COD-LIVER OIL.—Our Bergen correspondent writes on April 3 that, owing to the Easter holidays, the catch was poorer last week than that of the previous week. The output of all the Norwegian codfisheries, compared with that of the previous years, is as follows:—

| | Catch of Cod | Yield of steam refined cod-liver oil | Livers for Crude oil |
|----------------|--------------|--------------------------------------|----------------------|
| March 31, 1923 | 26,400,000 | 53,771 (Hect.) | 7,088 (Hect.) |
| April 1, 1922 | 22,100,000 | 41,739 " | 5,499 " |
| April 2, 1921 | 24,900,000 | 41,475 " | 5,353 " |
| April 3, 1920 | 21,200,000 | 32,100 " | 2,900 " |
| April 5, 1919 | 14,100,000 | 19,300 " | 2,700 " |

The market is firmer: it is said that considerable quantities of steam-refined oil have been bought for industrial purposes. Sellers consequently are holding aloof, asking higher prices. Finest non-freezing steam-refined quality has been sold at from 90s. to 92s. per barrel c.i.f. London. In London the market remains steady, and there now seems more inclination on the part of buyers to cover future requirements, in view of the low prices at present ruling. The catch this season has been extremely satisfactory, but we learn on all sides that the Norwegian manufacturers are selling large quantities of their crude cod-liver oil, which is being used for industrial purposes, rather than refine

the oil at the present low prices. During the past fortnight there has been a better demand from the Colonies. The London agents quote 90s. to 92s. per barrel c.i.f. London, according to brand, but no doubt these prices would be shaded for a quantity. Spot oil is selling at about 98s. ex warehouse.

ERGOT.—Fair sound Spanish or Russian is offered at 1s. 11d. to 2s. per lb., and wormy at 1s. 9d. to 1s. 10d.

GRINDELIA ROBUSTA is in fair demand at from 8½d. to 9d. per lb.

GUM ACACIA is steady, Kordofan sorts offering at 72s. 6d., and cleared at 77s. 6d. per cwt. on the spot.

IPECACUANHA is steady, ordinary thin Matto Grosso offering at 6s. 9d. and selected bales at 7s. per lb.

LIME JUICE is steady, with small sales. Best pale West Indian can be had at 2s. 9d., and medium at 2s. 6d. per gallon.

LOBELIA HERB can be had at 9d. per lb. on the spot.

MENTHOL is obtainable at 31s. 6d. per lb. on the spot for Kobayashi-Suzuki in case lots, but there is no demand at the moment. Sellers of April-May shipment quote 30s. c.i.f. The "Argun Maru" has brought 50 cases and the "Kashima Maru" 25 cases from Japan.

MERCURY.—The course of the market has been disappointing to holders, while the trade demand has again dragged. The available supplies are only moderate, but sufficiently widespread as to cause rather keen competition. Business has been done this week at £11 10s. to £11 15s. per bottle, and even a little less, but on Wednesday the market was flat at £10 10s. to £10 15s. There is no doubt that there is a little more Italian mercury available. The total American production for the past year was only 6,497 bottles, according to official returns. This therefore only denotes a slight increase against the output for the previous year, which amounted to 6,339 bottles, the latter being the smallest production in 72 years. Arrivals in London this week amount to 38,000 lb. from Italy.

OLIBANUM.—Fair pale drop is quoted at 90s. to 95s. per cwt., reddish at 80s., garblings 40s. to 45s., and siftings 62s. 6d. per cwt.

OPIMUM.—The spot price is steady at from about 14s. 6d. to 15s. per lb. for 12 per cent. druggists', and to arrive this test is quoted at 13s. per lb. c.i.f.

CONSTANTINOPLE, April 3.—"During the period March 20 to date, arrivals were as follows:—Druggists', 2,277 cases, 'softs', 120; Malatia, 13. The stock was:—Druggists', 400 cases, 'softs', 80; Malatia, 10. The total amount of opium sold during the past fortnight consisted of three cases, of inferior quality, which realised 1,020 piastres per oke. On the other hand, 40 cases purchased during the preceding weeks were shipped to Japan. This stagnation is attributable to the very large sales which have taken place during the past three months, and also to the weather, which is found to exert a beneficial effect on the crop. For this reason speculators are loth to purchase, and consequently stocks are beginning to accumulate. However, at the corresponding period of the past year the local stocks amounted to 320 cases, in addition to over 500 cases held in Smyrna, while to-day there are only 100 to 120 cases at Smyrna." A later advice informs us that after a spell of fine weather a sudden change has set in accompanied by severe frost and a considerable fall of snow, such as had not been experienced during the winter. However, at the time of writing, it was not known what effect these conditions had had on the sowings.

RUBBER.—Market is erratic and has considerably fluctuated since our last report, in fact, on some of the forward positions prices have moved as much as ¾d. per lb. within 24 hours. This condition is due to heavy profit-taking on the part of speculators, and the weakness of some of the holders of near rubber. On the other hand, there has been steady buying by manufacturers of spot parcels, and the decline of sterling in America has also influenced buying from that quarter. The weekly reduction in stocks, which has recently been a noticeable feature, was temporarily held up last week. Deliveries amounted to 1,251 tons, whilst arrivals totalled 1,224 tons, with a decrease of only 27 tons in the stocks. The London stock now stands at 63,322 tons. Quotations (Wednesday, 5 p.m.): No. 1 standard crêpe, and ribbed smoked sheet, spot and April, 1s. 4½d.; May-June,

1s. 4¾d.; July-September, 1s. 5½d.; October-December, 1s. 5½d. Hard, fine para, dull at 1s. 3½d. Balata continues quiet, and values have accordingly given way a little. W.I. sheet, 3s. 8d. Venezuela block, 3s. 4d. Iquitos block, 1s. 5½d. per lb.

SARSAPARILLA remains firm, grey Jamaica being quoted at 4s. per lb., native Jamaica at 1s. 9d. to 1s. 10d. per lb. as to quality, and Mexican 1s. 9d. Lima-Jamaica and Honduras appear to be unobtainable on the spot.

SENEGA can be had at 3s. 4d. per lb. on the spot. Rather lower prices have been quoted to arrive.

SHELLAC.—The trend of prices has been irregular, this being partly due to the erratic state of the market at the primary source. Further good quantities are being landed on this side, but the deliveries into consumption continue very satisfactory. The terms for spot delivery have been occasionally shaded a little this week, the spot quotation for usual standard TN orange quality being 350s. per cwt. Good to fine second orange is 390s. to 420s.; superfine, 450s.; AC cakey, 325s.; and GAL, 300s. per cwt.

SOY.—Best brands of Chinese offer at 3s. 9d. per gallon, duty paid.

TURMERIC is selling at dearer rates. For good sound Madras finger 52s. 6d. per cwt. is quoted, and 50s. for wormy. Cochin finger is offered at 35s., which can be shaded for quantity. Split bulbs are offered at about 18s. 6d.

Seeds, Spices, etc.

ALMONDS.—According to reports there are large stocks in Bari and Sicily, and prospects of good crops this season. At the same time, forward prices remain high—89s. per cwt. c.i.f. for Bari and 93s. to 94s. c.i.f. for Sicily. Spot stocks are light, but prices are below the parity of forward shipment.

COCONUT (DESICCATED) is dearer, the sales including halves at 44s. 9d. to 45s. 3d., and medium at 45s. per cwt. Fine and medium afloat has been sold at 43s. 6d. to 43s. 9d., March-April shipment at 43s. to 43s. 9d., April-May at 42s. 6d. to 43s. 3d. per cwt. c.i.f., and May-June at 42s. to 43s. c.i.f.

CLOVES.—Zanzibar are steady, with spot sales of fair at 1s. per lb. For March-May shipment sales have been made at 10½d. to 10¾d., April-June 10¾d., May-July at 10¾d. to 11d., c.i.f., being easier. The weekly wharf statistics show landings of 234 and deliveries of 4, leaving a stock of 1,789 bales, against 13,385 bales in 1922. Penang cloves are scarce, and sell in small lots at 3s. per lb.

FENUGREEK SEED is easier at 23s. per cwt. on the spot.

HEMP SEED is cheaper at 13s. 6d. per cwt.

PEPPER.—Fair black Singapore is quiet on the spot at 4½d. per lb. Sellers of March-May and April-June shipment quote 4½d. c.i.f. Lampong is 4½d. spot. Tellicherry for April-June shipment is 40s. 9d. c.i.f., and Aleppy for April-June 41s. 3d. c.i.f. White Muntok is quiet at 6½d. per lb. on the spot, and for March-May shipment sellers quote 6½d. c.i.f.; May-July shipment is 6¾d. c.i.f.; the value of white Singapore on the spot is 6½d. per lb., and the value of April-June shipment is 6d. c.i.f. The stock of white pepper in London is heavy at 1,975 tons, against 1,017 tons last year.

Essential Oils

THERE has been more inquiry for lavender oil, following a reported improvement of price at the source. West Indian distilled lime continues fairly active, and a large sale of hand-pressed has been made for export. Ceylon citronella is easier, but Java oil is advancing. Sicilian oils are unchanged, and Spanish spike has been in good demand. Cochin lemongrass is a shade easier to arrive. American wormseed is dearer. Star anise is easier to come forward.

ALMOND.—Genuine essential, s.a.p. is cheaper on the spot from 13s. 6d. to 15s. 6d. per lb. as to seller.

ANISE (STAR).—"Red Ship" on the spot is steady at from 1s. 11d. to 2s. per lb. The price to come forward is easier at 1s. 9½d. c.i.f. from second-hand sellers; importers' price is 1s. 11½d.

BERGAMOT on the spot is unchanged, holders of 37 to 39 l.a. quoting from 12s. to 12s. 3d. per lb. The price to come forward varies from 12s. to 12s. 5d. c.i.f.

CARAWAY.—Dutch double rectified is unchanged at from 35s. to 36s. per lb. on the spot.

CASSIA on the spot is steady at 8s. 3d. per lb. for 80 to 85 c.a. The price to arrive is round about this figure, but second-hands quote from 7s. 6d. to 7s. 9d. c.i.f.

CITRONELLA.—Ceylon is easier on the spot at 3s. 2d. to 3s. 2½d. per lb.; a parcel in course of landing being offered at 3s. 1½d. The price for shipment is unchanged at 2s. 11d. c.i.f. Java is very firm; business may still be done at 3s. 11d. in one quarter, but spot sales are reported at 4s. and up to 4s. 3d. is quoted.

CLOVE.—English distilled is unchanged at 7s. to 7s. 3d. per lb. for spot delivery.

CUBEBS.—Spot holders are offering at the cheaper rate of 27s. per lb.

GERANIUM.—Bourbon on the spot is scarce, and firm at 28s. 6d. per lb., with some holders asking more.

LAVENDER.—Reports from the source appear to confirm the improvement in values which is increased by the appreciation of the French exchange. There has been more spot inquiry recently and sales have been made, by holders anxious to realise, about the rates ruling some weeks ago. The present spot quotation for 38 to 40 per cent. is from 12s. 6d. to 13s. 6d. per lb. as to seller.

LEMON.—Sicilian is unchanged to come forward at from 2s. 11d. to 3s. 3d. c.i.f. The spot price ranges from 2s. 9d. to 3s. and upwards.

LEMONGRASS.—Cochin on the spot is steady at 2½d. per oz. The price for shipment is a shade easier at 2½d. c.i.f.

LIME.—West Indian distilled is firm on the spot at from 3s. 3d. to 3s. 6d. per lb. Spot sales of hand-pressed are reported at the higher price of 7s. per lb., at which there are still sellers.

MINT.—Japanese dementiolised Kobayashi-Suzuki is a shade better at 6s. per lb. on the spot. The price to come forward is 5s. 9d. c.i.f.

ORANGE.—Sicilian sweet is steady at 10s. 9d. to 11s. 6d. per lb. c.i.f. to arrive. Spot holders quote from 11s. to 11s. 6d. Bitter is offered for shipment at from 9s. 3d. to 10s. 6d. c.i.f., as to brand. West Indian sweet is obtainable at from 9s. to 9s. 9d. per lb. on the spot.

OTTO OF ROSE.—Guaranteed pure (Parry's analysis) Bulgarian is quoted at 30s. per oz. Anatolian is offered at 22s.

PALMAROSA is steady at 17s. per lb. for pots.

PATCHOULI.—Usual Penang quality is unchanged at from 29s. to 30s. per lb. Mysore is quoted at 35s.

PENNYROYAL.—Spanish, on the spot, is scarce, and 6s. 6d. per lb. is quoted for small lots.

PEPPERMINT.—American natural is quiet on the spot and unchanged at from 12s. 6d. to 13s. per lb.

SPEARMINT.—American is unchanged at 12s. per lb. on the spot.

SPIKE.—Spanish has been in good demand, drums lots being quoted at 2s. 9d. per lb., which is cheaper.

VETIVERT.—Bourbon on the spot is quoted at 20s. per lb.

WORMSEED.—The price to come forward is dearer at 24s. per lb. c.i.f.

Aromatic and Synthetic Chemicals, etc.

The demand for coumarin has brought about a further rise, as spot stocks are scarce. Terpineol is dearer. Musk xylol has also been in demand, and higher prices are quoted. Benzyl acetate alcohol and benzoate are cheaper following fresh arrivals.

| | | | |
|------------------------|--------------|------------------------------------|--------------|
| Amyl salicylate .. | 2/10 to 3/- | Geraniol (Java citron- ella) .. | 5/6 to 9/6 |
| Anubepine .. | 11/6 to 15/- | Heliotropine .. | 6/6 |
| Benzaldehyde f.f.c. .. | 3/- | Iso-eugenol .. | 17/- |
| Benzyl acetate .. | 2/6 to 2/9 | Linalol .. | 18/- to 24/6 |
| " alcohol .. | 2/4½ cwt. | Linalyl acetate .. | 18/- upwards |
| " benzoate .. | 2/9 | Methyl anthranilate .. | 6/- |
| Bisnastrol .. | 9/6 | Methyl salicylate .. | 2/6 |
| Cinnamic aldehyde .. | 6/9 to 8/- | Musk xylol .. | 9/- to 9/6 |
| Citral .. | 9/6 to 10/6 | Phenylethyl alcohol .. | 18/6 to 20/6 |
| Citronella .. | 17/6 to 22/- | Safrol .. | 2/3 to 2/6 |
| Coumarin .. | 15/- | Terpineol .. | 3/- to 3/3 |
| Eugenol .. | 11/- to 12/- | Vanillin .. | 23/6 to 24/0 |

Pharmaceutical Chemicals, etc.

BUSINESS in this section since the closure over the holidays has not been of any great volume, but a good deal of inquiry is being received, especially for those products that are now in short spot supply owing to the stoppage of imports from occupied Germany. Spot prices in a number of products have again advanced, and the market generally is now firm, with values appreciated all round since the Franco-Belgian occupation commenced.

ACETANILIDE is being quoted on spot at dearer rates and most offers from good holders are firm in the region of 1s. 7d. to 1s. 8d. per lb., with an occasional seller at 1s. 6d.

AMIDOPYRIN is steady on a slow market at about 13s. 6d. per lb.

ASPIRIN keeps very firm on spot in view of the Continental position; spot supplies of good brands are difficult to locate under about 3s. 3d. per lb.

BARBITONE has again advanced very considerably, and the usual quotation is now at about 18s. to 18s. 6d. per lb., but practically no supplies are available at the moment. Dearer prices on the Continent have resulted in this move on spot.

BENZOIC ACID is steady on spot at 2s. 2d. per lb., but there has been very little business about.

BROMIDES.—The spot position is decidedly firmer in many quarters, and higher rates are now being mentioned; there has been quite a good demand. Ammonium is in the region of 9d. per lb.; Potassium, crystals and granular, is up to 8d. to 9d. per lb. Sodium is quoted in most quarters at 9d. to 10d. per lb. At the same time it might still be possible to get an isolated lot at slightly cheaper rates.

CALCIUM LACTATE is quite unchanged on spot at 2s. per lb., with little business passing.

CHLORAL HYDRATE is firm on spot, although not much called for; offers are at about 4s. to 4s. 3d. per lb., for duty paid.

CITRIC ACID is firmer, with an improved demand. Both English and foreign are quoted at 1s. 8d. per lb. on the spot, with small lots offered at 1s. 8½d. Some foreign makers quote 1s. 8d. c.i.f.

COCAINE.—Hydrochloride is unchanged and selling in small lots at 14s. 9d. per oz., and slightly less for quantity.

CREOSOTE B.P., is steady at 2s. 6d. per lb., with business quiet.

CREOSOTE CARBONATE is seldom called for—the quoted price is unaltered at about 10s. per lb.

GUAIACOL CARBONATE remains at about 8s. 3d. per lb. on a slow-moving market.

HEXAMINE.—It is now difficult to find good spot supplies offered below 4s. 3d. per lb., and this price seems firm in view of the Continental rates.

HYDROQUINONE is firm on spot as offered in the region of 3s. 6d. per lb., and some holders are expecting higher values shortly; in fact one is already asking 3s. 9d.

LEPTANDRIN.—Makers quote the easier price of 13s. per lb.

METHYL SULPHONAL remains dull in demand, with the price rather easy in the region of 13s. per lb.

MORPHINE SALTS.—Makers' current prices are: Alkaloid crystals 11s. 2d., precip. 10s. 11d., acetate 8s. 9d., bromide 10s. 11d., hydrochloride 8s. 9d., cryst. 9s., sulphate 8s. 9d., sulphate cryst. 9s., tartrate neutral 10s. 11d. per oz.

PARAFORMALDEHYDE is still quoted at about 4s. per lb., but the little business done has been mostly at slightly cheaper prices.

PARALDEHYDE seems to have advanced on account of the Continental position, and the spot rates are now firm at 1s. 6½d. to 1s. 7d. per lb.

PHENACETIN is very firm and tending dearer at from 5s. 9d. to 6s. 3d. per lb. and this price is well supported by the dear offers coming to hand from the Continent.

PHENAZONE is generally mentioned at the higher figure of 7s. 6d. to 8s. per lb. for spot supplies, and the market seems to warrant that figure.

PHENOLPHTHALEIN has recovered to its former level of 5s. to 5s. 3d. per lb.

POTASSIUM PERMANGANATE.—B.P., so far as spot goods are concerned there is little worth mentioning that is not

quoted at 10½d. to 11d. per lb., and these prices will probably have to be paid.

RESORCIN is quoted at 5s. 6d. per lb., but possibly the sales passing are at slightly cheaper rates.

SALICYLIC ACID.—There is no alteration in the quoted spot rates of about 2s. 2d. per lb., and the Continental position continues firm.

SALOL inclines to move to still higher prices—some offers are from 2s. 9d. to 3s. per lb., with a probability of the higher rate obtaining before long.

SALTPETRE.—English makers recently reduced their prices by 1s. per cwt.

SANTONIN.—We have been informed on reliable authority that the price of santonin will in all probability in the near future be reduced to £60 per kilo.

SODIUM BENZOATE is steady at 2s. 2d. per lb., but there has been little doing of late.

SODIUM DIETHYLBARBITURATE is unchanged, on a dull market, at 17s. 6d. per lb.

SODIUM SALICYLATE.—Spot supplies from good hands are firm at 2s. 6d. per lb., and in view of the position on the Continent, there is nothing to indicate anything cheaper coming on the market yet awhile. One of the leading Continental makers has advanced his price of powder to 2s. 7½d. and crystals to 2s. 9d. per lb.

STRYCHNINE.—Makers' current prices are: Alkaloid crystals 4s. 3d., precip. 4s. 2d., arseniate 3s. 9d., bisulphate 3s. 4d., hydrochloride 3s. 8d., hypophosphite 5s. 6d., nitrate 3s. 8d., phosphate 4s., and sulphate 3s. 6d. per oz.

SULPHONAL is steady, but slow in being taken up, as quoted at 12s. 9d. per lb.

TANNIC ACID is at level rates of about 3s. 6d. per lb., with only small demands on the market.

TARTARIC ACID is in fair demand at 1s. 3d. for English, and 1s. 2½d. for foreign, on the spot. Italian makers quote 1s. 3½d.

TERPENE HYDRATE is unchanged at 1s. 9d. per lb. on spot, with little doing.

THYMOL.—East Indian bold white crystals, ex ajowan seed, are offered at 16s. 6d. per lb., landed terms.

The following are current spot prices: Antipyrin salicylate, 7s.; argent. colloidal, 56s.; caffeine soda benzoate, 10s.; caffeine soda salicylate, 10s. 6d.; camphor monobrom 7s. 9d.; ferrum redact., 1s. 8d.; lithium bromide, 7s. 9d.; lithium citrate, 7s. 9d.; lithium iodide, 21s.; lithium salicylate, 9s.; and sparteine sulphate, 2s. 6d. per oz. Theobromine pure, 11s. 9d.; theobromine soda salicyl., 8s. 6d. per lb.; thymol iodide, 32s. per lb.

Industrial Chemicals, etc.

London, April 11.

BUSINESS has been rather limited this week, but the firm tone reported recently is still very pronounced. This, of course, is almost entirely due to the situation on the Continent, where supplies are either held up or are being offered at enhanced values. The opinion generally expressed indicates still higher rather than lower prices to come along.

ACETIC ACID is now becoming in short supply on spot, and holders are able to demand almost their own price; 80 per cent. technical, £47; 80 per cent. pure, £48; 98 per cent. glacial, £70 per ton, ex wharf, London.

ACETONE.—British Government specification is available in small parcels, but there is not much demand when offered at about £125 per ton.

AMMONIUM (ANHYDROUS), 99.95 per cent., is now very steady, and a fair business has been done at the level rate of 1s. 6d. per lb.

ARSENIC.—The feeling remains uncertain, but there is no altering the fact for the present that white Cornish powder is very scarce and continues to command fancy figures of about £72 per ton delivered London. Business for forward shipment from abroad is difficult, buyers being very shy about contracting far ahead, although sellers seem willing to meet them on terms at about £58 c.i.f. An arrival of 400 cases has taken place from Japan.

BLEACHING POWDER is now dear on the Continent in most quarters, and this tends to make the market here

somewhat higher at about £11 to £11 5s. per ton for 35 to 37 per cent.

COPPER SULPHATE.—Prices vary. Some British makers quote at £27 in bags and £27 10s. in casks, delivered and f.o.b. Some parcels should be obtainable at the old cheaper rates still.

CREAM OF TARTAR is now firm on spot at 92s. 6d. per cwt. for B.P., and indications point to a slight advance. Business has been good.

EPSOM SALT meets with little demand; commercial quality is offered on spot at about £5 10s. per ton, in bags.

FORMALDEHYDE is very steady, although quiet; supplies on spot are not great; quoted at about £87 10s. per ton. Nothing coming in from Germany.

GLAUBER'S SALT is slow in moving off, and the quotations at about £4 per ton, in bags, might possibly be shaded.

LEAD ACETATE is very steady and a fairly active market. Limited supplies are offering at: Brown, £36; white crystals, £39 per ton; and these prices may harden.

LITHOPONE is dearer, and it is now hard to find spot parcels of good white 30 per cent. Continental red seal under about £22 to £22 10s. per ton. Continental offers have advanced considerably.

LEAD PRODUCTS.—Dealers offering imported red lead and litharge and white lead find Continental prices tending upwards; their prices for London are: Litharge and red lead, about £36; white lead, £43 10s. per ton.

OXALIC ACID is again rather easier with some offers down to 6½d. to 6¾d. per lb., with the demand poor.

POTASH CAUSTIC.—The spot position is very firm at £35 per ton, in drums. What little is available on the Continent now is quoted at very high rates.

POTASSIUM PERMANGANATE.—Commercial quality shows a further advance, and the general price asked is at least 10d. per lb., with little about.

POTASSIUM PRUSSATE has been called for frequently, but generally in small lots, with the price steady in the region of 1s. 5¼d. to 1s. 5½d. per lb.

SODA CAUSTIC is steady from both dealers and British makers at unchanged rates. The former report very little doing. Dealers' prices: 70 to 72 per cent., £19 10s.; 76 to 77 per cent., £21 10s. per ton, in drums, ex wharf, shipping port. British makers quote to domestic consumers on contract at: 70 to 72 per cent., £20; 76 to 77 per cent., £21 10s. per ton, in drums, carriage paid. Their prices for export vary as to destination.

SODIUM BICARBONATE from British makers is steady and in good sale at £10 10s. per ton, in bags, carriage paid in the United Kingdom.

SODIUM CARBONATE (washing crystals) are steady with importers quoting at the same price as the British makers, which is £5 5s. per ton, in bags, carriage paid in the United Kingdom. Dealers' quotations are generally ex store.

SODIUM CHLORATE is steadier and has been more inquired for of late; 2¾d. to 2½d. per lb.

SODIUM HYPOSULPHITE continues very steady, and dealers are mostly unable to quote much below the level of £16 per ton for pea crystals in 1-cwt. kegs. Commercial quality is at about £10 10s. per ton, in casks.

SODIUM PRUSSATE is easier in some quarters, where prices have been indicated at 8¾d. to 9d. per lb. There are rumours of cheaper prices for late forward positions.

SODIUM SULPHIDE.—The Continental rates coming to hand hold very firm at increased values. Dealers are quoting at about £15 10s. for 60 to 62 per cent. solid and £16 for broken; 60 to 65 per cent. concentrated, £15 per ton.

COAL-TAR PRODUCTS, ETC.—Pitch keeps up firm at its high values with supplies very short. Naphtha is a little cheaper. Naphthalene has gone dearer again. There are no other changes of importance to record in this market, which has been quiet since the holidays. ANILINE OIL AND SALT are at about 11d. per lb., with little inquiry about. BETANAPHTHOL has been seldom asked with the quoted price in the region of 1s. 2d. per lb. PITCH is very firm in London at 192s. 6d. per ton with little to meet the sustained demand. Pure METHYL ALCOHOL is quite steady although in no great

demand at £108 per ton, ex wharf, London. CARBOLIC ACID crystals continue short, and the price is in consequence firm at 1s. 8d. per lb. in large bulk packing for 39° to 40° C. crystals. CRESYLIC ACID remains unchanged at 2s. 3d. per lb. on a quiet market. CREOSOTE OIL is very steady with a fair volume of business about at 10½d. per gallon, naked, in bulk shipment, f.o.b. PYRIDINE, on account of high shipping rates, is firm at 12s. per gallon with little doing. HEXAMETHYLENE stands steady on spot at 3s. 9d. per gallon, with not much demand being felt. DISINFECTANTS are unchanged from the old price of 3s. 9d. per gallon, barrels free. NAPHTHALENE is dearer in consequence of advances on the Continent at £19 to £20 per ton. Crude, £6 to £11 10s.; crystals, £16 10s.; powder, £16 10s.; balls, £24; tablets, £28; candles, £28 per ton, packages free.

Fixed Oils, etc.

THE general tone continues healthy, with business sustained in volume. The demand for export continues surprisingly good. Prices are mostly maintained and firm. Linseed oil and turpentine have improved, and close at better rates, and with more business about. ACID OILS.—Supplies are now very scarce indeed, and anyone requiring supplies must pay fancy prices. Coconut is now 40s. 6d.; palm-kernel, 40s. 6d.; and the market is not offering groundnut. CASTOR OIL is £2 per ton higher, with the demand marked for seconds. Pharmaceutical is now 59s., first pressing 54s., second pressing 53s. per cwt., in barrels, net, ex works Hull, in not less than 1-ton lots. COCONUT OIL.—At much about the higher rates quoted last week, the market has been firm all the week. Deodorised, 53s.; Ceylon, 48s.; Cochin 50s., single hogsheads being quoted at 53s. COTTONSEED OIL.—The market on spot remains firm, and good business is being done. Deodorised, 50s.; common edible, 45s. 6d.; soapmaking, 43s. 9d.; crude, 41s., c.i.f. GROUNDNUT OIL is unchanged on a steady market. Deodorised, 55s.; crude Oriental, 45s., c.i.f. LINSEED OIL.—The market for raw, naked, has improved since the holidays, and prices have been steadily on the up grade. At the close the tone was strong, with good business being done. On spot, 51s. per cwt.; April, 50s.; May-August, 47s.; September-December, 43s. 9d. Hull, on spot, 49s. 9d.; April, 47s.; May-August, 47s. 7½d.; September-December, 44s. 1½d. PALM-KERNEL OIL tends firmer this week, with prices so far unchanged. Deodorised, 49s.; crude, 45s., c.i.f. PALM OIL continues to rule at high levels, with the market very firm in consequence of shortage of supplies and continued active demand. Lagos, 39s.; softs, 39s.; hards, 42s., if available. RAPE OIL.—Prices are level on the week, with the market steady. Refined, 49s.; crude, 45s., c.i.f. SOYA BEAN OIL.—There is a firmer tone here, and prices are moving up. Deodorised, 45s.; crude Oriental, 40s., c.i.f. TURPENTINE.—There is a much better tone for American, and prices are dearer for spot and near-at-hand positions. Late forward deliveries are quoted at the recent lower levels. On spot, 112s. 6d.; April, 112s. 6d.; July-December, 90s. Business for July-December has been done at somewhat cheaper rates than those quoted. Total London stocks are returned as at 10,000 barrels, which shows a decrease of 1,500 on the week. French is not offered to this side at present. WOOD OIL is dearer and very firm, the spot price of Hankow in barrels having advanced to about 112s. per cwt. on the spot, and April-May shipment to 104s. April-June shipment is 92s. for Hongkong.

Bulgarian Otto of Rose

THE final report of Shipkoff & Co., Ltd., Sofia, on last year's rose crop, dated March 26, states that:—The rose harvest 1922 was about ten days earlier. It began on May 16 and ended on June 11. With the exception of only four rather hot days towards the end harvesting was effected under ideal weather conditions, in consequence of which the results obtained were most satisfactory. The new otto was superior in grade, rich in aroma, and by far the best since the famous record 1900 crop. The most interesting feature,

however, of the last rose crop was the fact that there were very few, if any, sophisticated lots of otto. Of the preceding four crops there remained fully 1,800 kilos (63,450 oz.) unsold otto. The total yield of the rose crop 1922 was 2,060 kilos (72,615 oz.)—fully 20 per cent. larger than the previous crop. Of these 2,060 kilos, 1,600 kilos (56,300 oz.) were distilled by the growers themselves and 460 kilos (16,215 oz.) by the exporters. Thanks to the large stock of old otto on hand, the price of the new otto was rather low and fixed immediately after the harvest, on the basis of the closing price for the crop 1921—at the rate of leva 18,000 spot cash per kilo, and as the buying was pretty heavy the opening price quickly advanced to leva 19,000 and 20,000 per kilo, and the last 300 kilos (10,375 oz.) of the crop were sold at leva 21,000 per kilo. The effect of this rather low price, which was considerably below the average price for pure otto prior to the war, was nearly to double the demand, it being 80 per cent. more, or about 2,800 kilos (a little less than 100,000 oz.), and this was thus in excess of the actual output of the new crop. The total 1922 crop was rapidly bought up by the end of December, 1922. The balance of this year's demand is being supplied from the old stock. During the last three months over 400 kilos (14,100 oz.) old stock have been bought by exporters, left without sufficient new otto to meet their engagements abroad. The United States will import during this year fully 40,000 oz. (1,135 kilos). It is, as yet, too early to forecast the outlook of the coming crop. The rose gardens have suffered no damage from the long and severe winter, thanks to the heavy falls of snow. The general expectation is that the crop 1923, if not larger, will be as good as last year's.

German Economic Situation

THE remarkable success which attended the first energetic and serious effort by the Imperial Bank to stabilise the value of the mark is no longer lauded as a signal victory; in fact, the complaint is general that it was too successful. The expected fall in the price of commodities has scarcely materialised, the actual decline averaging only 5 to 10 per cent., greatly to the anger and chagrin of the consumers. On the other hand, the cost of production has increased all round, and far from being cheap, many German goods are now actually dearer than in other European countries. The natural consequence of this state of affairs, as was pointed out in this column last week, has been a considerable drop in exports, due to the fact that foreign countries no longer find it profitable to purchase high-priced German goods. Hence, at the present moment German industrialists are chiefly concerned in discovering ways and means of arresting the slump in exports, which now threatens to have disastrous effects on the general economic situation. In certain circles the demand is openly voiced that, just as the Imperial Bank undertook to appreciate the value of the mark, it is now imperative, in order to meet the present altered situation, to reverse the process, i.e., to bring about an organised depreciation of the German currency, as the sole effective means of attracting foreign buyers. In this connection the "Berliner Tageblatt" states that in certain circles the Government is said to have promised that in the course of April the dollar would appreciate to 30,000 marks (the present value is about 21,000 marks), but no credence is attached to this assertion. At the same time it is pointed out that the other remedy, the "dumping" of German goods in foreign markets, holds out but a scanty prospect of success, since conditions are such that for many articles the home demand is comparatively restricted, a factor which precludes the possibility of making good the loss on exports by charging higher prices for the goods to the German consumer. Industrial circles are now realising that export duties and similar dues are practically insignificant charges, and that German export trade can only be restored by removing the chief obstacle—the high cost of production. Already State aid is being invoked to this end; in other words, more subsidies in some shape or other. The decline in chemical exports in consequence of prices reaching the level in other countries is now acknowledged in the reports for March of the Chambers of Commerce to the Prussian Minister of Commerce and Industry. Business in the chemical and drug markets has been practically nil, only pharmaceutical chemicals being in slight demand, possibly by speculators, at slightly higher prices. Curiously enough, some anxiety is being felt at the advent of a new competitor in the market for heavy chemicals, Russia having now begun to export certain technical products. The effects on the chemical industry of Germany of being deprived for a considerable period of coal-tar by the isolation of the Ruhr are now being discussed, and this factor affords a striking evidence of the interdependence which exists in the highly organised and complex German industrial system.



Testing Prescriptions

SIR,—I have read Mr. A. H. Jenkin's letter in your issue of March 24 (p. 420), and wish to point out that he appears to have relied too much upon published reports of cases. He is apparently ignorant of the actual defences used, and also of the circumstances of the cases themselves. Unfortunately, it is quite impossible to discuss a matter such as this through the columns of a paper. I can only assure our members that the individual cases are watched carefully, and that steps will be taken to deal with the matter collectively.—Yours faithfully,

G. A. MALLINSON,
Secretary, Retail Pharmacists' Union.

SIR,—Like your correspondent, Mr. W. R. Hues (*C. & D.*, March 10, p. 355), I have had considerable experience of Continental dispensing, and when he calls our system of measuring liquids antiquated I must disagree with him. May I remind him that, in the process of weighing drugs into a bottle, the most careful dispenser is liable to overshoot the mark occasionally; and if there are several ingredients already in the container he is not likely to reject the whole, whereas in measuring each drug is measured separately, and a slight overplus of any single one can be remedied before it is added to the bulk. And may I also ask him if he remembers how very small quantities, such as a few minims of creosote or carbolic acid, were generally dispensed. The majority of foreign dispensers I have seen at work used to drop these out of the bottle, which is not conducive to accuracy.

Faithfully yours,

LIQUID MEASURE (10/3).

SIR,—The articles on inaccurate dispensing recently appearing in your columns have been highly interesting, and in some respects somewhat amusing. The reply of the President of the Pharmaceutical Society was to the point, dignified, and can justly be described as "the retort courteous" to Dr. Trotter's (Islington) assertions. Whether any other action was necessary to put the pharmacists right in the eyes of the public is a matter of opinion. In my humble opinion, more harm is done to the status, reputation, or whatever we like to call it, of the pharmacist in the eyes of the "man in the street" by the practice of "slapping up" mixtures, etc., while he waits than by an occasional article appearing in a big "daily" on the enormities of the errors committed by dispensing chemists. In the first place, he reasons (and rightly, I think) that a prescription that takes only from three to five minutes or so to prepare cannot require a great amount of skill on the part of the dispenser, and he has a bias against its utility at the start. In the second place, it is often realised that the article appearing in the Press is another "stunt" to help to fill the columns in the absence of enough news from Egypt on the excavations in "King Tut's" tomb. I am quite prepared to admit that some people do appreciate ultra-quick dispensing. Also, some take all they read in the particular paper they favour as gospel, but not all of them. There is no excuse whatsoever for the incorrect quantities recorded by the analyst in mixtures recently dispensed by pharmacists; but I wonder what would be the result could an inspector be allowed to visit a dispensing doctor's, pick out any mixture he chose, ascertain what dosage of different ingredients it was supposed to contain, and, if sufficiently miscible, divide it into three equal parts. . . . "What a game it is!" Fancy the poor N.H.I. chemist, closing time 7 p.m.—at 6.45 p.m., fifteen or twenty scripts still to do, has to meet his best girl at 7.15 (lucky dog), or take his wife and family to the pictures, as the case may be—fancy, I say, having to ascertain whether a bottle brought for a mixture holds 7½ oz. or 8½ ditto, under threat of fearful pains and penalties. Under the circumstances (best girl, wife and

family waiting etc.) he deserves the V.C. if he cleans the bottle internally, and rejuvenates it externally, by removing four, five or six other labels already there, instead of his adding his own quota. My firm conviction is that under the circumstances in which a great part of the N.H.I. dispensing is done, perfect accuracy is unattainable. We all know the theory: N.H.I. dispensing should be done by duly qualified pharmacists, or under their direct supervision—but is it? In the words of the immortal bard, sage (or it may have been "Old Spring Onions"), "I don't think," with the emphasis on the "don't." I came to the conclusion, some three years ago, that N.H.I. dispensing was not worth while. That is, for a man like myself, who has a brisk counter trade, a bit of wholesale, and one or two good side-lines. I may be wrong, but I prefer to see a bit of money in the till every day of the week, rather than lay it out, without interest attached thereto for one, two or three months. One thing I do know, my temper is angelic compared to what it was under the vexatious restrictions and regulations of N.H.I. dispensing. I believe many single-handed pharmacists would resign from the panel were they not fearful of the "other fellow" or the company shops getting all the work. It is my considered opinion that the theory that N.H.I. dispensing brings other "grist to the mill" is a fallacy. To expect dispensing to be done accurately by, or under the supervision of, a pharmacist, on the terms of remuneration given, is like expecting a master man to work for an apprentice's wage. Therefore I say that only by cheap labour can the N.H.I. dispensing be made to pay. If John Willie (the branch manager) is at dinner, he is not disturbed from his roast beef and Yorkshire pudding, to make up Mrs. Brown's mist. cretæ c. opio. This is attended to by a junior. . . . The whole system of N.H.I. dispensing is derogatory to our calling. To toady to the medical profession is not the way to get their confidence and respect; they are no better or worse than ourselves, and are equally liable to mistakes, which on account of their limited curriculum (as regards pharmacy at any rate) are sometimes of greater magnitude than our own.—Yours faithfully,

Bristol.

A. W. CORNISH.

SIR,—The panel pharmacist has now an excellent opportunity to appreciate the true meaning of the popular phrase, "Heads I win, tails you lose"; and the unfortunate Middlesex chemist who dispensed the boric-acid lotion (*C. & D.*, March 31, p. 423) probably appreciates it best of all. A more illuminating course of events could not be selected; first, to present an impossible prescription; second, to admit that the chemist's action was a correct one; and, third, to caution him not to do it again! After all, the dispensing counter is not an examination room; in the latter place one expects to find an inaccurate prescription occasionally, but this is done with the special view of testing a candidate's experience and to see what he will do in an emergency. To fine a chemist for a deficiency of 0.1 gr. of quinine while leaving alone the many errors which occur daily in prescribing is indeed straining at a gnat, and the whole thing is reminiscent of the Profiteering Act, under which the unfortunate retailer was prosecuted for halfpennies while the big combines were left untouched.

Faithfully yours,

SUB TENTH (3/4).

SIR,—"Xrayser II.'s" opening paragraph in his "Observations and Reflections" (*C. & D.*, April 7, p. 479), draws attention to the restrictions under which pharmacists work compared to doctors who do their own dispensing, and puts into words what many of us have had in our minds for a long time. There is a further disability which the chemist suffers and the doctor is free from which "Xrayser II." might add to his list—the composition of the tribunal by which his actions are judged. If a pharmacist is supposed to have been inaccurate in his dispensing, he is at the mercy of analysts, inspectors, magistrates and others who have no practical knowledge of the limitations of accuracy in pharmaceutical work and frequently indulge in cheap witticisms at the pharmacist's expense—all such sayings being promptly noted by the reporters to lend colour

to their articles. But if any charge of inadequate attention or unskilful treatment should be brought against a medical man, the tribunal to judge his action is one composed of members of his own profession, who not only should have an expert knowledge of the facts, but are not likely to be unduly severe on a brother doctor. In all cases in which a chemist is concerned, there should be a practical pharmacist available for reference on the technical details involved.—Faithfully yours,

ÉGALITÉ (9/4).

Methods, Prices and Profits

SIR,—I adhere to my previous statement (*C. & D.*, February 24, p. 286) that it takes at least 20 to 22 per cent. to run a pharmacy successfully. My calculations are not based on rough percentages, but are founded on a careful study of returns for the last four years and include establishments with owners, managers, assistants (qualified) and apprentices, the selling being both cash and credit, and the buying by journey (which averaged three months) monthly and cash with order accounts. "Jay Mack" may be interested to know that the latter method was the most unsatisfactory of the lot, due to agents, wholesalers or manufacturers not completing the transaction in one delivery. The commercial traveller was correct in his method; it was the simplest way to correct the error; any other plan would have taken no end of work to rectify. Gross profits have fallen very considerably, due chiefly to buying terms such as those for window displays, etc. There are only a limited number of fortnights in the year, and if one begs three or more parcels a year from each of the manufacturers who impose these conditions it would require a glass-house to carry out the contract. There are many fine firms, however, who leave the art of salesmanship to the retail buyer; their terms are fair and reasonable, their goods are well advertised and merit the continuous encouragement which they get and deserve. The complaint of the retailer is the burden inflicted upon him by this octopus of impossible, unreasonable, profiteering conditions which, were it not for the more generous firms, he could not entertain. Auditors, trades unions, etc., have nothing to do with the question at issue; no doubt they serve a useful purpose. If "Jay Mack" would use his influence and ability to probe a little deeper into this subject and leave the fighting Jew and Moses alone, he might be able to do something to relieve the burden of his fellow-craftsmen. Moses was one of the finest business men of his time; percentages did not worry him, but he knew how to make a "draught" the *débri*s of which was worth collecting.—Yours faithfully,

A. MACKSEE (28/3).

SIR,—Jay Mack's letter in your issue of March 24 (p. 421) is full of interest, and I quite agree with the statement that Leath and Ross have argued the matter fairly regarding a just distribution of the profits between manufacturer, wholesaler and retailer. There is another matter to which attention should be paid, and especially by the retailers, viz., the fact that, while some manufacturers place part of their goods on the P.A.T.A. list, other goods of their make are quoted by them and by the wholesale houses at 13s. for the 1s. 3d., 33s. for the 3s., and 54s. for the 5s. size, yet they are sold by both retailers and wholesalers who are ardent supporters of the P.A.T.A. This seems to me to upset the principle of the P.A.T.A., and makes me wonder what the wholesalers get on the transaction when the retailer gets less than 10 per cent. Some years ago I was the proprietor of a fairly well-known patent medicine, and was pulled up by one of the wholesale houses referred to above for charging them 8s. 6d. per doz. for 1s. 1½d. articles, less 5 per cent. They wanted 10 per cent., making a great fuss about the "labourer being worthy of his hire." They said, "If you do not give us the 10 per cent. we shall take the goods out of our list." I replied, "Very well, take them out." They were out for one issue but have been in ever since. A little more constancy and consideration for right seems to me to be necessary all round with the retailer, wholesaler, manufacturer, aye, and with the P.A.T.A.—Yours faithfully,

MANUFACTURER'S MANAGER (28/3).

Irish Ph.C.'s and R.D.'s

SIR,—With reference to the report of the council meeting of the Pharmaceutical Society of Ireland in your issue of March 24, about the discontinuation of the Registered Druggist examination, point 2 (p. 399), which is to give druggists with registration of twenty years and over a pharmaceutical certificate, is not what was agreed to at the special meeting that was held in November last, but the very opposite. When I said at that meeting that if the chemists want to stop this examination they will have to give all druggists a dispensing certificate (I would have explained this in my amendment, only I was not allowed to propose any), one member said that all druggists with twenty years' registration should be made chemists. Mr. Storey informed them that it would not be lawful to make them chemists without examination, and could not be done; but he admitted it was done before on two or three occasions. I think Mr. Storey made practically all the members (excepting myself) believe it was impossible; and the very next thing that I see is Mr. Storey proposing to the Council what he said was impossible to do. I may also state that the Committee in charge of these proposals is composed of eight druggists with over twenty years' registration, and one druggist with practically eighteen years' registration, who lives so far away from Belfast that I should like to know if he was present at the committee meeting when these points were passed. Also, the fee that they are asking is out of the question. Regarding point 4, this leaves out the part covering apprentices to a druggist in later years not entering for the examination, and it was to be included. So on behalf of the druggists of under twenty years' registration, I protest against this unfair method of this committee, and also state that these items cannot be considered by the Pharmaceutical Council as representing the registered druggists of Ireland.—Yours faithfully,

WM. TAGGART.

Belfast.

SIR,—In your issue of March 24 a report of the monthly meeting of the Irish Pharmaceutical Society's Council states that the R.D. question has been up again, and that four points or headings are given as a basis for discussion. I am in agreement with No. 1, and this examination (R.D.) should never have been. No. 2 is all right as far as it goes, but the fee should be £100 and no less; and my reason for saying so is quite honest. Money is not the value it used to be. The majority of apprentices in the last twenty years paid no premium, but got paid during their apprenticeship, whereas in my apprentice days a big fee had to be given in addition to serving one's time and doing all sorts of menial work. No. 3: All R.D.'s on the register prior to 1922 should take out a course of lectures on pharmacy, materia medica and chemistry for this modified examination, and pay a fee of £50. No. 4: All persons who may be admitted after the full term of apprenticeship with chemists and druggists or R.D.'s to the final Ph.C. examination should pay an additional fee of £10 with the examination fees and the usual lectures, etc., as laid down for that examination. Mr. Storey must be aware of the fact that a number of R.D.'s had every opportunity of taking out the licence in a legitimate way, having served, or nearly served, the full term with a Ph.C., but were satisfied with the R.D.—Yours, etc.,

THOMAS LEMON.

Markethill, co. Armagh.

Council Elections

SIR,—In the pending election of the Council of the Pharmaceutical Society, we regret that, owing to the condition of his health, Mr. J. Rymer Young has decided not to seek re-election. Mr. Rymer Young has given thirty years of unstinted and devoted service to pharmacy, and has occupied with distinguished ability and success the highest office attainable by pharmacists, that of President of the Pharmaceutical Society. As his nomination for the Council came from Manchester and he is a member of the Manchester Pharmaceutical Association, we have followed Mr. Rymer Young's distinguished career in pharmacy with interest and sympathy, and have supported him consistently all the years he has

served on the Council. Now that he has been constrained to withdraw from active work on the Council, we hope and trust that he will long be spared to enjoy the leisure he has so justly earned. As a possible successor, Mr. E. H. Simmons has been nominated as a candidate for the Council of the Pharmaceutical Society with the support of all the local pharmaceutical organisations. He is President of the Manchester Pharmaceutical Association, an ex-President of the Salford Pharmacists' Association, and secretary since its inception of the Salford Pharmaceutical Committee. We have every confidence in recommending his candidature to pharmacists throughout the country as an earnest and loyal supporter of the Society, who will do his utmost for pharmacy, and will take advantage of all the powers possessed by the Society to place pharmacy on the firmest possible foundation.—Yours faithfully,

W. KIRKBY,

Chairman, Manchester, Salford and District Branch of the Pharmaceutical Society.

F. W. BATES,

Chairman, Manchester Pharmaceutical Committee.

— W. I. SCHOLES,

Secretary, Lancashire County Pharmaceutical Association.

T. MILLER,

Secretary, Manchester Pharmaceutical Association.

Legal Queries

R. V. (24/3).—The wording of the label you send (Formalin Throat Tablets) does not involve liability to medicine-stamp duty.

S. W. (4/4).—The wording for the "compound bismuth mixture" label does not disclose any grounds for liability to medicine stamp-duty.

A. G. (20/2).—The last date for making application for the registration of apothecaries' assistants as chemists without examination was December 31, 1920. No further applications under the by-law can be considered.

D. H. (3/4).—Provided that the ingredients given on the label constitute a *bona-fide* disclosure of the composition of the "mouth cleanser or tonic throat gargle" the label does not involve liability to medicine-stamp duty.

P. I. C. (19/4).—DOVER'S POWDER is outside the Dangerous Drugs Act by regulation. The purchase and sale of the article do not therefore need recording in any circumstances, notwithstanding the *obiter dicta* of the Home Office.

A. J. (27/3).—(1) "KNOWN, ADMITTED AND APPROVED" REMEDIES UNDER THE MEDICINE STAMP ACTS may be sold by persons who have served a regular apprenticeship (i.e., by indenture) to a chemist and druggist. (2) The title "Modern Pharmacy" is an open one; its use is not confined to qualified chemists.

H. W. (11/2).—The terms of employment should be laid down at the time an apprenticeship begins. Many apprentices do not receive any remuneration during their term, it being considered that the value of the knowledge obtained is ample consideration. The tendency of the times, however, is to pay apprentices a small sum weekly.

Ipecac (28/2).—(1) An extended list of statutory poisons was given in the *Chemist & Druggist Diary*, 1922, to which you should refer in any doubts as to whether there are restrictions on the sale of any poison. (2) Orange quinine wine can only be sold without a licence by qualified chemists.

W. W. (8/4).—The use of a doctor's name in connection with proprietary articles is often due to the fact that a medical man devised the particular combination of drugs. On the other hand, the title "doctor" is not exclusively the possession of medical practitioners—some are only entitled to call themselves doctor by courtesy. Hence it comes about that unless the title "Dr." is used misleadingly in connection with a proprietary article there is no objection to the practice.

Manager (9/4) asks whether an employer is entitled to make a deduction from the wages of an assistant in respect of two days during which the assistant was absent from work on account of illness. If not, how can the assistant recover the amount due to him? [In the absence of a special agreement to the contrary, an assistant is entitled to receive his full wages during his absence from work owing to illness. The employer's obligation to pay wages continues until the contract of service has been terminated by the requisite notice. If an employer withholds payment of wages due to an assistant the amount can only be recovered by legal proceedings.]

K. H. (7/4).—The Pharmacy Acts require that a copy of all prescriptions dispensed containing poisons shall be kept in a book for that purpose. Prescriptions containing poisons, whether National Health Insurance or otherwise, come within this legal requirement. So long as duplicate prescriptions in Insurance dispensing were supplied, it was easy to carry this out, but the suppression of duplicate prescriptions laid the onus on chemists to copy all prescriptions containing poison in the prescription-book. The length of time for keeping the copies is not specified, but two years would probably be reasonable time. In the Dangerous Drugs Bill now before Parliament there is a clause which will make it unnecessary to copy National Health Insurance prescriptions.

S. G. (10/4) has for the past eight years been tenant of a combined shop and house in a country town. The rent was originally £52 a year, which has been increased by 40 per cent. under the provisions of the Increase of Rent Act, 1920. What would be "S. G.'s" position in the event of the owner selling the property? [In any event, "S. G." could not be evicted, or have his rent increased, until his existing tenancy has been terminated by the requisite notice, the length of which depends upon the terms of the tenancy. At present "S. G." is also protected from eviction and having to pay additional rent by the Increase of Rent Act, 1920. That Act expires on June 24, and it remains to be seen to what extent the protection of tenants will be continued after that date.]

C. D. C. (5/4) holds certain shares in an outside concern as nominee of a company of which he is manager, and wishes to know how he is to claim repayment of the income-tax paid on the shares; if it is to be done on his own claim form or on a separate form. [The claim should be made by "C. D. C." not as part of his own claim, but on a separate form, which he should sign as trustee or in other similar capacity in which he holds the shares. The claim should give the name and the address of the registered office of the company on whose behalf the shares are held, and should be accompanied by the usual certificates from the company & other concern in which the shares are held that the tax has been deducted and accounted for to the tax authorities.]

Old Elor (7/4) refers to reply to "T. J. W." (9/3) in the *C. & D.*, March 19, 1921, in which it was stated that the income-tax officials cannot claim back income-tax for more than three years, and asks if this is still the law. He has recently had a letter from the local Inspector of Taxes requiring him to furnish returns of income from 1914 to the present year. He has consulted an accountant, who told him that the tax authorities can make back assessments for ten years, and he wishes to know if this is so, as he has no books or accounts going back beyond three years. [The law is still as stated in the reply given in the *C. & D.* of March 19, 1921. The income-tax authorities cannot make any assessment upon "Old Elor" for any period prior to three years before the present year of assessment, nor is he under any legal obligation to furnish accounts, although if he were assessed for the three previous years, which is all he could be assessed for, he would have to prove to the Commissioners that the assessment was wrong, if he disputed it. The best course for "Old Elor" to follow is to write to the Inspector, and tell him that there are no accounts available prior to three years ago, and offer to let him have returns for these three years if he desires them.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

J. G. (7/4).—BOOKKEEPING.—Mack's Ledgers, which are advertised in the Coloured Supplement, are suitable for use in your business. The ledgers are so arranged that if the necessary entries are made regularly the position of the business can be ascertained at any time. Directions are given for drawing up a balance-sheet for income-tax purposes.

J. W. R. (9/4).—EASTON'S SYRUP.—The solidifying and precipitation that occasionally happens in preparing Easton's Syrup is not well understood. The trouble is probably due to the formation of a different quinine salt than is intended—an acid or hydrated variety. Manufacturers on a large scale encounter the same difficulty. If the quinine is mixed with the phosphoric acid diluted with as much of the menstruum as possible a liquor that solidifies is not likely to be produced.

Remirol (10/4).—COCONUT SHAMPOO POWDER.—See *C. & D.*, I., 1922, p. 12. Formulas are also given for liquid soap.

Dispenser (7/4).—LIQUID DOG-SOAP.—See *C. & D.*, I., 1922, p. 12, the formula given there being an excellent one.

C. D. S. (3/4).—SWEEPING COMPOUND.—In place of the damp sawdust or tea leaves generally employed when floor sweeping, to prevent the dust rising the following is suggested:—

| | | | |
|----------------|-----|-----|-------------------|
| Dry sawdust | ... | ... | 10 lb. |
| Paraffin oil | ... | ... | 2 pints |
| Paraffin wax | ... | ... | 1 oz. |
| Coarse salt | ... | ... | $\frac{1}{2}$ lb. |
| Eucalyptus oil | ... | ... | $\frac{1}{2}$ oz. |
| Sea sand | ... | ... | 4 lb. |

Melt the paraffin wax with a little of the oil, add the eucalyptus oil and the bulk of the paraffin, then mix with the sawdust and the other ingredients.

J. G. A. (19/3).—VALUE OF BUSINESS.—Studying the figures you send, the business to which you refer is being worked on a very small stock and with low expenses. Assuming, however, that you have verified these figures, we should place the goodwill at £100 to £150, and to arrive at the value this should be added to the stock (£350) and fittings (£100). The position of the business and the class of business transacted may, however, very much modify the figure for goodwill.

W. S. W. (9/4).—VETERINARY WHITE OILS.—"Veterinary Counter Practice" gives two formulas for white oils, the following being the better:—

| | | | |
|-------------------|-----|-----|---------|
| Vitellos | ... | ... | xij. |
| Sapon. moll. | ... | ... | 3vj. |
| Ol. terebinth. | ... | ... | 3xx. |
| Liq. ammon. fort. | ... | ... | 3v. |
| Acidi acetici | ... | ... | 3iv. |
| Camphoræ | ... | ... | 3vj. |
| Spirit. | ... | ... | 3viij. |
| Ol. succini rect. | ... | ... | 3iv. |
| Aquam | ... | ... | ad Oiv. |

Rub the soap gradually with 10 oz. of water to form a smooth jelly; add the spirit with the camphor dissolved in it; mix the turpentine and the oil of amber; add gradually to the mixture, stirring assiduously the while, and aiding emulsification by the occasional addition of a little water. Then add the ammonia. Now transfer to a Winchester, add gradually the acetic acid diluted with a pint or more of water; add the eggs one by one, well shaking all the time, and finally make up to 80 oz. with water. The liniment is better without the acid.

H. K. (20/3).—CUTICLE SOLVENTS generally consist of disguised solutions of vegetable acids—citric, tartaric, mucic or acetic. We are unable to state whether these substances fulfil the rôle assigned to them.

W. F. (5/4).—GOLD BLOCKING POWDER.—The formula for blocking powder given in "Pharmaceutical Formulas" is the one generally employed. It may be that your customer, who complains that the powder cakes on the die, is using it too freely. You might try the experiment of diluting the powder with some powdered acacia, so as to render it less susceptible to heat.

E. N. (21/2).—THEATRICAL COLD CREAM.—The last sample of transparent theatrical cold cream which we examined was perfumed white soft paraffin. We think this must be the variety for which you are being asked. The theatrical cold cream for which a recipe is given in "Pharmaceutical Formulas" is of the opaque variety.

J. C. M. (21/2).—COOLING TOILET CREAM.—From what you state it would appear that the addition of a small proportion of menthol to an ordinary toilet cream would fulfil the conditions required by your customer.

L. B. (21/3).—REMOVING TATTOO MARKS.—There have been various methods suggested for removing tattoo marks. These were summarised in the *C. & D.*, II., 1922, p. 108. The methods consist in promoting inflammation in the skin, in the hope that the colouring matter will be shed with the slough.

J. E. V. (17/2).—SHOW CARBOY COLOURS.—The following are the carboy colours for which you ask:—

| Green | Red |
|---|---|
| Solution of nickel sulphate acidulated with sulphuric acid. | Solution of iodine acidulated with hydrochloric acid. |
| Orange | Blue |
| Solution of potassium bichromate acidulated with nitric acid. | Copper sulphate solution treated with excess of ammonia and diluted to the required tint. |

S. P. (12/2).—ADHESIVES FOR LABELS ON TINS are usually made by adding to ordinary paste a substance such as butter of antimony, sugar, glycerin or honey. It is not possible, however, to guarantee that any one of these additions will be successful.

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," April 15, 1873.

The Irish Druggists

We laid before our readers last month the position of the Irish druggists, and the monopoly of dispensing possessed by the Apothecaries' Company. We also detailed the steps which had been recently taken to remedy whatever grievance existed. We are glad to notice that the prospects of a satisfactory settlement are very promising, and we believe, indeed, the negotiators at this moment can take their choice between the Apothecaries' Company of Ireland and the Pharmaceutical Society of Great Britain as their sponsors. The feeling in Dublin, we are told, is strongly inclined towards the former body, and doubtless by accepting their aid the absence of opposition would be ensured. There may be peculiar advantages, too, in connecting the pharmaceutical body with the Apothecaries' Company which do not occur to us. But looking at the matter disinterestedly, and from an outside point of view, we cannot avoid the conclusion that the ultimate consequence of such a union will be that the pharmacists will take a position as an inferior grade of the medical profession, and may be liable to some disagreeable interference in the future. There cannot be a question but that, other things being equal, the perfect independence of both pharmacy and medicine, as it exists in this country, is the preferable condition. Besides which it would be a strange thing if both Irish and British pharmacists were not benefited by a more intimate acquaintance. The bill, when agreed upon, will have to be carried through Parliament, and the climate of Westminster is exceedingly fatal to bills introduced after Easter, unless they are of great urgency, or should happen to be purely sentimental. But whether carried this session or next, we think the energy and promptitude of the Dublin druggists is worthy of recognition.

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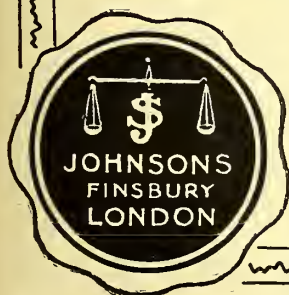
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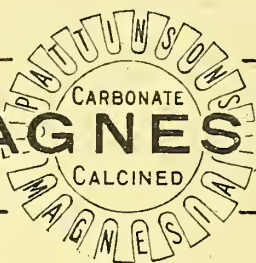
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CHARLES L. HUISKING, LTD.

74 Great Tower Street, LONDON, E.C. 3.

**PHARMACEUTICAL CHEMICALS, DRUGS,
ROOTS, HERBS, LEAVES, etc.***Representing in England the following—*

"ORANJE," LTD., Amsterdam

A. OULMANN & CO., Leghorn

ALF. GAUSSEN, Nimes, France

PABLO GROSSMAN, Mexico City

A. E. BEEBE & SONS, Niles, Michigan

J. L. P. SPOHR, Lugano, Switzerland

- Essential Oils, Synthetics, etc.

- Olive Oil, Orris Root, Juniper Berries,
Italian Produce

- Roots, Herbs and Leaves

- Sarsae, Jalap, Mexican Produce

- Wayne County Peppermint Oil, Natural
and Redistilled

- Extract of Male Fern Root

AGENTS FOR AMERICAN FIRMS.*Let us have your Enquiries.*American
Correspondents

—CHAS. L. HUISKING, Inc., 5 Platt Street,

Cable Add. : "CELAITCH NEW YORK."
Codes : A B C, 5th Ed. ; Bentley's Improved.**NEW YORK CITY, U.S.A.**

Theobromine Pure Alkaloid

12/6 per lb.

Theobromine Sod. Salicylate

7/6 per lb.

ex STOCK LONDON.

**Societeit voor Chemische Industrie,
"Katwijk," Katwijk on Sea, HOLLAND.***Representative and Depository for Italy :*

PEPPINO STEYN, Via Gustavo Modena 20, MILAN.

**CREAM OF TARTAR
CITRIC ACID
TARTARIC ACID
LIQUORICE (Root & Juice)
MANNA & MANNITE
SICILIAN SULPHUR****L. J. DE MARTINO**

72 MARK LANE, LONDON, E.C. 3

Telegrams : "Onitramed London." Telephone : Avenue 2965.

QUININE

**QUINIDINE
CINCHONINE
CINCHONIDINE**

and

SALTS

Sugar-coated Quinine Tablets and Pills.

**BANDOENG
JAVA****BANDOENG QUININE FACTORIES****AMSTERDAM**

De Wittenkade 48-50.

Telegrams : "Kininefabrick Bandoeng." *Samples, prices and particulars on application.* Telegrams : "Semadmy Amsterdam."Apply to - - - **R. W. GREEFF & CO., Ltd., Thames House, Queen Street Place, London, E.C.4.**
Telegrams : "Greeff, Cannon, London."

SULPHUR TABLETS.

Orange—Plain—Lime

| | | | |
|------------|------------|------------|------------|
| 7 lbs. | 28 lb.s. | 56 lbs. | 112 lbs. |
| 1/4 | 1/2 | 1/1 | 1/- |

400 Cartons with each cwt. free, and in proportion.
NO BETTER TABLET ON THE MARKET.

Send your orders NOW.

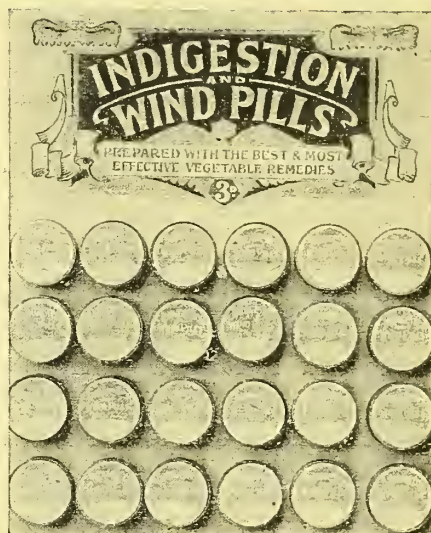
CASTLE HUSKISSON, LTD.

Manufacturing Chemists,

Swinton Works, Moon St., ISLINGTON, N.1

3d. series PILLS

Handsomely Carded. A Splendid Seller.



Per 15/- gross boxes.

LARGE SHOWCARDS NOW SUPPLIED.

MATTHEWS & WILSON, Ltd.

HOP 5497. 6/8, Cole St., Borough, S.E.1

Jules Denoual & Co.

FOR

LOZENGES
PASTILLES
CAPSULES
CACHOUS
EUCALYPTUS
OIL

CARLTON WORKS,
Asylum Rd., London, S.E.15

GLOSSETTES

(Regd.)

THE ORIGINAL
CUSHION-SHAPED

Licorice and Menthol Pellets

Have you had par-
ticulars of the
10/6 payment for
window-show offer?

If not—ask

ERNEST JACKSON & CO., Ltd.

MANUFACTURING CHEMISTS,

CREDITON, DEVON.

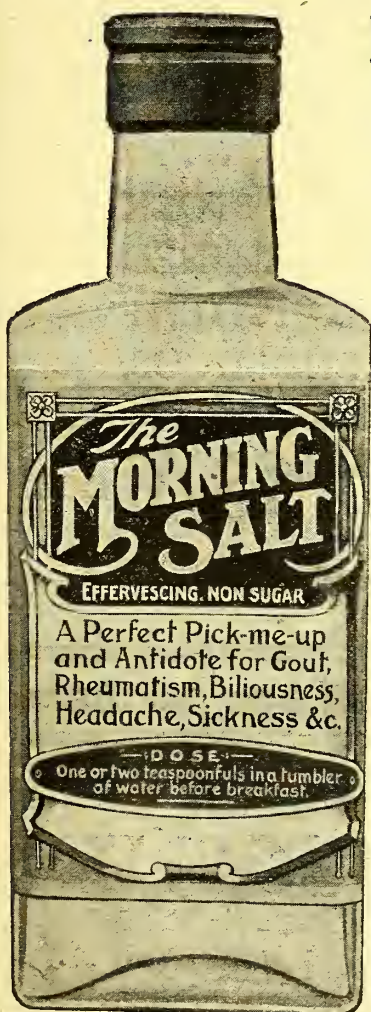
London Dept.: Plantain Place, Crosby Row, Boro', S.E.1.

BLYTON, ASTLEY & CO.

Manufacturing Pharmacists

LOWER BROUGHTON, MANCHESTER

BUY FOR THE SEASON,
a Pharmaceutical article made by
Pharmacists for the Pharmacy.



MORNING SALT

(a palatable non-sugar preparation) as illustrated

PER 11/9 DOZ.

In cartons and handsome coloured wrappers

PER 12/3 DOZ.



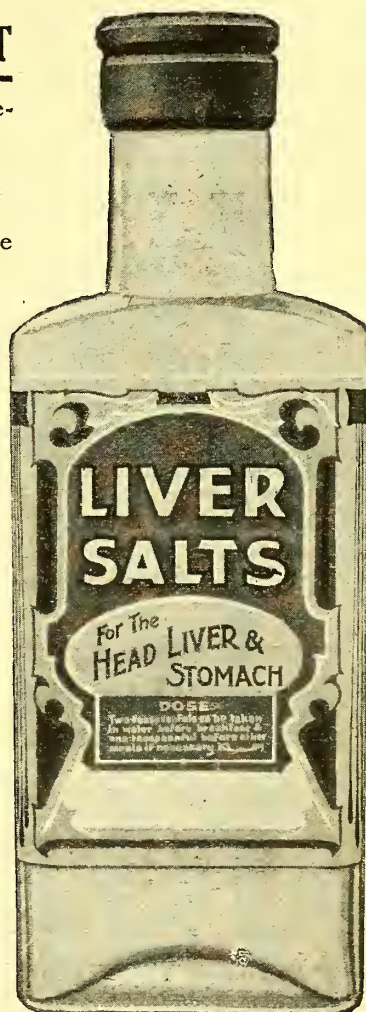
LIVER SALT

(as illustrated)

PER 11/- DOZ.



*Chemist's own name
and address printed
on orders for 3 dozen
and upwards.*



We Exhibited

at the **Peldo**
(Patent applied for)

IDEAL HOME EXHIBITION

and created thousands of new users.
See that you get **YOUR SHARE.**

IF YOU DO NOT ALREADY STOCK
"PELDO," IT CAN BE OBTAINED
FROM ALL THE LEADING PATENT
HOUSES, OR DIRECT FROM US.

RETAIL PRICE
(P.A.T.A.) **1/6**

WHOLESALE
PRICE **13/6** DOZ.

Showcards and Window Display Material supplied.

Remember "Peldo" business is all new business

Sole Proprietors and Manufacturers :

C. R. HARKER, STAGG & MORGAN, LTD.

DEVON WHARF AND BELL WHARF,

EMMOTT STREET, MILE END, LONDON, E.1.

The scope for sales

of Germicidal Soap, P., D. & Co., becomes more apparent the more the subject is explored.

* * * * *

It is a pure soap combined with mercuric iodide, and coloured blue for distinctiveness. As a bactericide its abundant lather is about six times as potent as a 5% solution of phenol; yet it is non-irritating to the skin if properly used.



TERMS AND SALES AIDS ON REQUEST.

Clarke's Blood Mixture

Special Terms for Window Show

Any Distributor ordering One Gross 3/- size Blood Mixture—or its equivalent in value—is offered an extra half-dozen Blood Mixture for 14 days' Window Show.

DUMMIES AND SHOWCARDS ENCLOSED WITH EACH ORDER.

MINIMUM PRICE FACE VALUE

33 $\frac{1}{3}$ per cent. on cost to our Distributors.

FREE CASES

Carriage Paid on £100 orders.

Orders despatched in strict rotation.

The Lincoln & Midland Counties Drug Co. Ltd.
PARK STREET, LINCOLN.

Dr. Bengué's Ethyl Chloride for Local and General Anaesthesia in Glass and Metal tubes.

Large selection of tubes.

Anestile for Local Anaesthesia.

Narcotile for General Anaesthesia.

Methyl Chloride.

Ask for Special Terms and Showcards for Dr. Bengué's Balsam.

Dr. BENGUÉ & CO., MANUFACTURING CHEMISTS,
52 Charlotte St., LONDON, W.1.

ERGOAPIOL (Smith) PROTECTIVE MARK

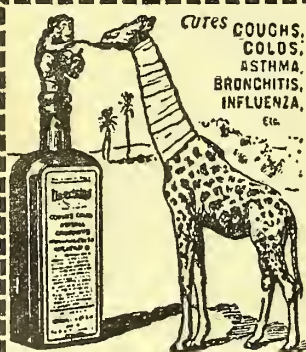
Patented in U.S. and Foreign Countries.

Ergoapiol (Smith) is now identified by the letters M.H.S. in the gelatin on the inside of each capsule. These letters are not visible from the outside, but they are plainly discernible in the gelatin when the capsule is cut in half.

MARTIN H. SMITH CO. NEW YORK, N.Y.

British Agents—

THOS. CHRISTY & CO., 4-12 Old Swan Lane, London, E.C.4.



"No case too bad!"

Licoricine
ACTS LIKE MAGIC

For Coughs, Colds, Asthma, Bronchitis, Influenza, Whooping Cough, &c.

| | | | | | |
|--------------------------|---|---|---|------|---------------|
| 10 $\frac{1}{2}$ d. size | - | - | - | 8/6 | per doz. net. |
| 1/3 | " | - | - | 12/- | " " |
| 3/- | " | - | - | 27/- | " " |

£2 worth Carriage paid. £6 worth and upwards, subject to 5% discount. Minimum Retail Prices, 10 $\frac{1}{2}$ d., 1/3 & 3/-.
N.B.—This allows the Chemist a profit of nearly 33%, or 4d. in the 1/- on £6 lots.

MANDALL & CO. LTD., 17/23 STEPNEY ROAD, NEWCASTLE-ON-TYNE.

*A High-class Pharmaceutical Preparation
for sale by Pharmacists only*

WESTON'S 'STOP-COUGH'

MANUFACTURED BY QUALIFIED CHEMISTS
AND SOLD ONLY BY QUALIFIED CHEMISTS.
CAN BE RECOMMENDED WITH CONFIDENCE
AND CARRIES A GOOD PROFIT.

Send us a post-card for our Special Window Display Terms.

GRAFTON CHEMICAL CO., LIM'D.
59 GRAFTON STREET, MANCHESTER.

PHONE : CENTRAL 6914

ENGLISH DRIED HERBS ROOTS, etc.

Clover Flowers, Broomtops, Yarrow, Mugwort, Mouse-ear, Wild Carrot, Ground Ivy, Speedwell, Agrimony, Coltsfoot leaves, Bittersweet, Fumitory, Dog-grass, Yellow Dock, Poppy heads, Comfrey root, etc.

For full list apply—

FLEMONS & SONS (Herb Merchants) **DUNSTABLE**

THE BEST HOUSE FOR ASPIRIN CASCARA AND ALL TABLETS IN BULK.

Write for samples and prices before buying.
Superior machinery and scientific control.

R. GIBBINS & CO.
1 BIRKBECK ROAD, KINGSLAND, LONDON, E.8.

ESTABLISHED 1772

HENRY'S CALCINED MAGNESIA

Continues to be prepared with scrupulous care, in the greatest chemical purity, by
Messrs. THOMAS & WILLIAM HENRY, 11, East Street, St. Peter's, Manchester.
And is sold in Bottles, authenticated by a stamp bearing their name. Trade Mark, "Henry's Calcined Magnesia".
New York: Messrs. SCHIEFFELIN & CO, William Street. **PRICE 2s 9d** Paris: Messrs. ROBERTS & CO, 5, Rue de la Paix.

NIGROIDS

Registered Trade Mark

The word "Nigroid" is the registered property of Ferris & Co., Ltd., and represents the product invented and introduced by them.

for the Voice and Throat.

Wholesale terms on application. Nigroids are stocked by all the Wholesale Proprietary Houses.

FERRIS & CO., Ltd., Wholesale Druggists, BRISTOL.

EVERYBODY WANTS THEM!

**Powerful Publicity
Campaign Creates
Enormous Demand**

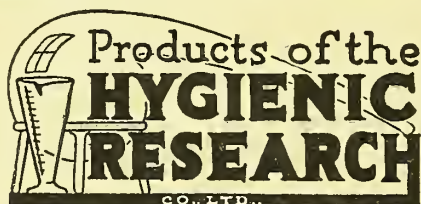


The powerful publicity now appearing in the "Daily Mail" and the "Daily Mirror" on behalf of:—

'Ruby Balm' 'Ruby Balm Oils'
'Veterinary Ruby Balm' 'Germicidal Veterinary Soap'
is creating an enormous and widespread demand.

To be sure that the demand will be adequately met we are making a generous special offer to Retailers of 38½% discount on business which our advertising is creating for you.

Retailers who wish to share in the profits of this new business should make immediate application for full particulars to—



100-106 Moorgate Station Chambers, London, E.C.2
Telephone LONDON WALL 679

Factory Telephone - Dartford 87
Priority Road, Dartford

BEECHAM'S PILLS

WHOLESALE PRICES.

Beecham's Pills:

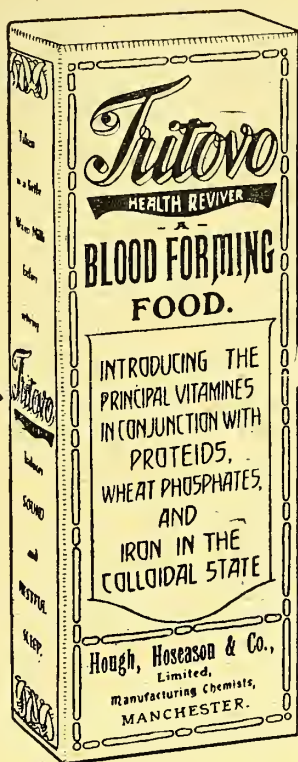
| | | | | | | |
|-----------------------------------|----|----|----|----|----|------------------------|
| 1s. 3d. size | .. | .. | .. | .. | .. | 10s. 6d. per doz. net. |
| 3s. 0d. " | .. | .. | .. | .. | .. | 26s. 6d. " " |
| 5s. 0d. new size, contains double | | | | | | 50s. 0d. " " |
| the quantity of 3s. box, | | | | | | |

Beecham's Cough Pills:

| | | | | | | |
|--------------|----|----|----|----|----|------------------------|
| 1s. 3d. size | .. | .. | .. | .. | .. | 10s. 6d. per doz. net. |
| 3s. 0d. " | .. | .. | .. | .. | .. | 26s. 6d. " " |

Minimum quantity £5 value, Packages FREE. Carriage PAID. CASH WITH ORDER.

Cheques to be made payable to THOMAS BEECHAM, and crossed "Westminster Bank, Ltd., St. Helens."



Rx

*Tritovo.**H. H. & Co.*

TRITOVO

A blood-forming, health-giving TONIC FOOD. Its continued use is associated with a feeling of mental and physical fitness derived only from a system whose chief organs are working in perfect harmony.

The enthusiasm with which this preparation has been taken up by the Medical Profession ensures its success as a selling line of Real Merit.

Packed in 2 Sizes, 1/9 and 3/-, showing a good margin of Profit.

HOUGH, HOSEASON & CO., Ltd.

Manufacturing Chemists,

Sun Buildings

MANCHESTER.

"A WARNING TO ALL CHEMISTS"

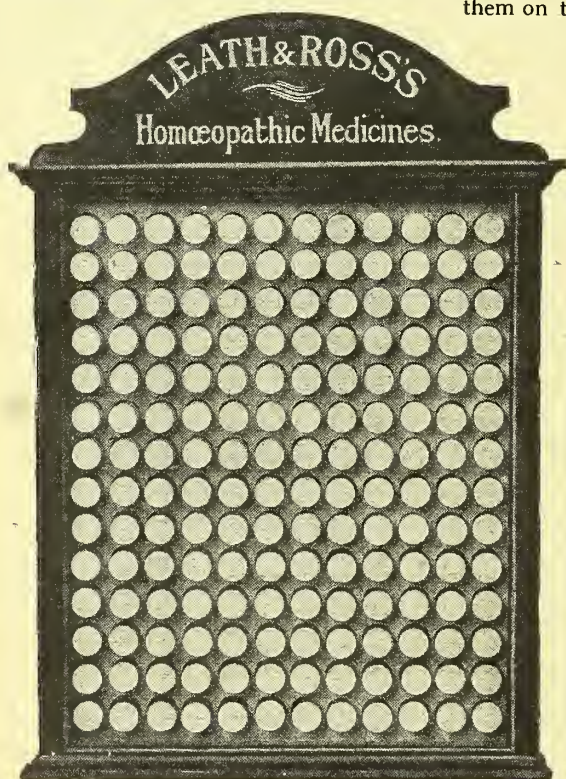
DO NOT BE A RIP VAN WINKLE

WAKE UP NOW

H.R.H. The Prince of Wales has appointed a homœopathic physician to be his regular Medical Attendant.

The Editor of the Lancet has written "Proving the pudding by the eating, it would be difficult to say in the present state of Allopathic Pharmacology that the doctrine of Cure by Similars (Homœopathy) is wrong." *In other words, it is right.*

The Science of Homœopathy is progressing rapidly and, concurrently with it, the demand for our well-known **Homœopathic Medicines**. In order that every chemist should get his proper share of the sales of them, he should have one of our handsome UPRIGHT SHOW CASES well displayed in his pharmacy. They are very potential sales promoters, and we supply them on the following most advantageous terms, viz. :



Dimensions of the Case, Height (including scroll) 26 in.,
Width 19 in., Depth 6 in.

Do not delay, send now to—

LEATH & ROSS Homœopathic Chemists
(Qualified by Examination)

295 HIGH ROAD, Brondesbury, LONDON, N.W.6.

Telephone : Hampstead 1174.

| | £ | s. | d. |
|---|----|----|----|
| 2 gross 1/- as- sorted Pilules and Tinctures, @ 4/6 per doz. | 5 | 8 | 0 |
| Half cost of Showcase (costing £3) ... | 1 | 10 | 0 |
| | 6 | 18 | 0 |
| 10% monthly a/c | 13 | 10 | |
| | £6 | 4 | 2 |

Or Cash with Order

£6 net.

You can choose your own medicines, or leave the selection to us. We should send the best selling lines only, and agree to exchange any within twelve months, FREE OF CHARGE.

Mr. HAROLD HAW, M.P.S., 5 Albert Terrace, Blackpool, writes: "SIRS—Showcase to hand safely; very satisfactory; has already been admired by several chemist friends."

September 13, 1921.

Dr. BUCHANAN'S SKIN CLEAR

A positive cure for all skin diseases—Eczema,
Barber's Itch, Bad Legs, Pimples, Ringworm,
Chilblains, &c.

1/3 tins (P.A.T.A.) Skin Clear 10/- doz.
9d. tabs. (P.A.T.A.) Skin Clear Soap 6/- „
(In cartons)

An attractive window display will be sent on request.



ADVERTISING.

An extensive advertising campaign begins this month and spaces have been booked in many of the leading papers in the country:—

Dr. BUCHANAN'S
Skin-Clear

A Positive Cure for Eczema,
Pimples, Sore Places, Chil-
blains and all Skin Diseases.
Soothes, Heals, Stops Pain, & cetera.

Price 1/3 from all Medicine Vendors.

CLEARs THE SKIN

Clears the Skin

INVALUABLE for Cuts,
Bruises, Burns, Rashes,
Itching and all Skin Affections.

Price 1/3 from all Medicine Vendors.

Dr. BUCHANAN'S
Skin-Clear

SPECIMEN ADVERTISEMENTS.



**SUPPLIES MAY BE OBTAINED THROUGH YOUR
USUAL WHOLESALE HOUSE OR DIRECT FROM US**

POTTER & CLARKE, Ltd.

Wholesale and Export Druggists,

60, 62, 64, Artillery Lane, London, E.1.

and at 24 Luna Street, Great Ancoats Street, Manchester.

Established 1813.



TRADE MARK.

One of the very best sellers in your business,
with a specially rapid sale, and well advertised.



1/3

WOODWARD'S "GRIPE WATER"

1/3 per Bottle

Under the protection of P.A.T.A.

Net Price : 1 gross delivered carriage
paid and in free case to your door, £7.

Your profit is 28½ per cent

W. WOODWARD (1920) Ltd., 79-87 Fortress Rd., London, N.W.5

**Are You Stocking
Our Latest Success?**

Sphagnol

**VETERINARY
Soaps and Ointment**

NO pharmacist in touch with farmers and stock-breeders should fail to feature these attractively wrapped lines which form efficient remedies for MANGE, ECZEMA, CANKER IN EAR, RUNNING SORES, SCALY LEGS, ETC.

Get in touch with us now for terms.

Sphagnol Veterinary Ointment retails at 1/- a tin and Sphagnol Veterinary Soap retails at 10d. a tablet.

MORE GOOD LINES

Sphagnol Medical Soaps and Ointment offer the biggest profit on every sale. We are building up your trade by extensive advertising. Sphagnol is prepared from a distillate of peat and is a proven remedy for ACNE, ALOPECIA, ANAL FISSURE, BLEPHARITIS, CHILBLAINS, DERMATITIS, ECZEMA, ERYSIPELAS, HÆMORRHOIDS, IMPETIGO, INSECT BITES, PRICKLY HEAT, PRURITUS, PSORIASIS, FALLING HAIR, SCABIES, SEPTIC WOUNDS, URTICARIA and BURNS.

Write now for terms.

PEAT PRODUCTS (SPHAGNOL), LTD.
Dept. B 2, 18/19 QUEENHITHE, LONDON, E.C.4

DUTCH
*Sugar
of Milk.*

"THE BEST"

**HOLLANDSCHE
MELKSUIKERFABRIEK
Amsterdam.**

IDOZAN

This new colloidal form of Iron is widely prescribed by members of the Medical Profession and gives astonishingly good and prompt results in the treatment of Anæmia.

Retail 5/- per Bottle.

You may recommend it with confidence and sell it with profit.

Write for particulars and acquaint yourself with its worth

Order through your Wholesaler.
Stocked by BLEASDALE, LTD. (York) — SANGERS — MAY ROBERTS — EDWARDS — RAIMES CLARK (Leith) — JOHN THOMPSON (Liverpool) — JAMES WOOLLEY (Manchester) — and others.

CHAS. ZIMMERMANN & CO. (Chem.), LTD. Ferrosan Dept.
9-10 ST. MARY-AT-HILL, LONDON, E.C.3.



Sulfuid

RAPID CURE

INSTANT RELIEF,

RINGWORM, SCABIES, IMPETIGO
SOVEREIGN CURE FOR
ECZEMA AND OTHER SKIN DISEASES.

The principal ingredient in this quick and certain cure for skin diseases is Sulphur in a liquid form hitherto unobtainable. Owing to its extraordinary power of penetration it reaches the root of the trouble and can be guaranteed to effect a cure of the most stubborn case of ringworm within 14 days—Scabies and similar diseases in very few applications. It is guaranteed to be non-poisonous, non-corrosive and non-irritant to the most tender skin.

RETAIL PRICE, 3/-; TRADE PRICE, 27/- per doz. (P.A.T.A.)

Packed in half-dozens in attractive display cartons.

HOUSEHOLD OINTMENT.

Sulfuid Household Ointment is the same potent solution in ointment form and will be found invaluable in the treatment and rapid cure of minor skin troubles, such as cuts, grazes, burns, scalds, chaps, boils, pimples, and will impart a smoothness and freshness to tender skins in cold or bad weather.

RETAIL PRICE, 1/9, 3/-; TRADE PRICE, 15/9, 27/- (P.A.T.A.)

Packed in dozens in attractive display cartons.

Mrs. PARKER, WARD & CO., Ltd. (124), Windsor House, Victoria Street, S.W.1.

Sole Distributing Agents to the Wholesale and Retail:
W. EDWARDS & SONS, 14-18 NILE STREET, CITY ROAD, N.1.

The Children's Chemist.
—a special point of stock—
for Baby's comfort.

Defenceless!
You are unable to protect yourself when you are in bed, sick and ill. But if you send your doctor's prescriptions to me you will be protected against stale, weak or impure drugs being used in the make-up of your medicine.

Only fresh and pure drugs are kept in stock at my Pharmacy.

Always a fresh stock of
Glaxo
"Builds Bonnie Babies"

M.P.S.,
Westgate - Ripon

My Pharmacy and its Policy.
I am here to give efficient and honest service. My drugs are pure, fresh, and carefully selected, and I stand behind whatever I sell.

This pharmacy is established to provide you with whatever you need in sickness and in health. I have given years of study to learn the Pharmacist's craft, and my experience is a guarantee that your Doctor's prescriptions will be faithfully and accurately dispensed. Come and see me.

The right food for Baby is an economy and makes the little one healthy and happy. That is why I recommend Glaxo, the food that does indeed build bonnie babies.

M.P.S.,
PHARMACIST,
CUDNOR.

Why not Advertise?

Pharmacists have greater opportunities for doing bigger business through Prestige Advertising than the ordinary retailer. Look at the three advertisements above—they are facsimiles from some of the personal advertising campaigns which the Glaxo Local Advertising Department have recently prepared for their Chemist friends.

Why not let us help you? This service is entirely free, and we will supply you with first-class lay-outs, copy, blocks and all necessary printing instructions for your own advertising campaign in your local Paper, and, in certain circumstances, will pay a proportion of the cost of the space. Fill in the coupon, and you will receive detailed information by return post.

CUT THIS OFF AND POST TO-DAY TO

Glaxo

LOCAL ADVERTISING DEPT., 53 OSNABURGH ST.,
LONDON, N.W.1.

Please send me full details of your Local Advertising service. I attach my printed address label hereto.



TWO SORTS NOW.
HUMAN AND VETERINARY.

MINIMUM PROFIT, 25 per cent.

Extra discounts on orders for £2 and over. Carriage paid on ALL orders.

*Our "best terms" quotation will interest you.
We invite you to write for it TO-DAY.*

THE DENVER CHEMICAL MANUFACTURING CO.
St. Ann's Road, London, E.3.

NURSE HARVEY'S MIXTURE

A safe, simple, and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessities from him. Moreover, the retailer has a profitable return on a quick turnover.

For Direct Terms apply to—

OSCAR SCRUTON & CO., YORK

Why not Advertise!

in your Local Paper—
it pays. See the interesting Scheme offered to up-to-date Chemists on the previous page.

Write to the "Glaxo" Local Advertising Dept. to-day.

SOUTH AFRICA.

Branches in all Important Towns.

LENNON LIMITED

WHOLESALE AND RETAIL
CHEMISTS AND DRUGGISTS.

Druggists' Sundriesmen.
Dealers in Surgical Instruments, Dental, Optical, and Photographic Goods, Perfumery, and Assay and Mining Requisites. Contractors to Hospitals and Public Institutions.

AGENCIES UNDERTAKEN.

London Office:

12-14 LAFONE ST., LONDON, S.E.1.

Sasso

Olive Oil



Preferred throughout the world

P. SASSO e FIGLI

ONEGLIA, ITALY.

The Largest Olive Oil Factory in Italy.

GRAND PRIX, GENOA 1914: SAN FRANCISCO 1915.

WHOLESALE ONLY.

Fredk. Boehm Ltd

15, 16, 17, JEWRY STREET, LONDON, E.C. 3.

Telephone: AVENUE 1365 (3 lines).

Telegrams: "BISSULA, TELEX, LONDON."

Teletypewriter: WALBROOK 596.

GLASGOW.

NEW YORK.

Use our Service for Better Developing and Printing!

MANY people will become amateur photographers this year. And our Developing and Printing Service is going to make them enthusiastic about their negatives and prints. It pays! It pays you because you will sell more films. It pays us because you will always use our Service. Start now! Not to-morrow; not next week, but now! Send a spool.



Let us prove to you the value of better negatives and prints. Drop us a card for our latest list — contains full information on our Service, which meets all needs effectively.

Express Developing Service
296 High Road., Streatham, S.W.16.

DEVELOPING
Our Motto 'SERVICE'

Pharmacists may confidently entrust their customers' films to the new
CHRISTIE & HODGSON
Quick-despatch 'Quality' Service.

Best possible results at keen prices.

DEVELOPING: (Net wholesale prices)

Roll Films ... all 6 and 8 x ... 4d. each.

" " " 10 " 12 x ... 6d. "

" Irrespective of size.

Proportionately low prices for Printing, Enlarging and Copying.

Write for full net wholesale trade price list to:

CHRISTIE & HODGSON, LTD.,
246 West Street, Sheffield.

PRINTING
Large Output Facilities.

DEVELOPING and PRINTING SAME DAY SERVICE

Bright Sparkling Prints that Please.
Zodella Service will help your business.
Write for Trade List and Terms Now.
Only a limited number of New Accounts to be opened.

Wallace Heaton Ltd.
17-27 CHANGE ALLEY, SHEFFIELD.

DEVELOPING :: PRINTING

of real merit by expert workers Best work :: Best speed
Best materials All work received first post is despatched

SAME DAY

So confident are we of your satisfaction that your first spool will be developed, printed and returned

FREE!

Daily collection and delivery within 5 miles of EALING, where we have really first-class works, with very latest equipment for speed and accuracy. We pay postage one way, and allow 33% discount.

LET US ENLARGE FOR YOU!

THE ROLL FILM COMPANY,
Shaftesbury Hall, 5a Uxbridge Road, EALING, W.5
WE ALWAYS GIVE REAL SATISFACTION TO ALL.

DEVELOPING.

All sizes, up to

4-plt., 6 or 8 expos., 4d.; Postcard and 5 x 4, 5d.;
2-plt. and 7 x 5, 8d. 12 expos., 50% extra.

PRINTING.

All sizes, up to

3 1/2 x 2 1/2, 1/2; 4 1/2 x 2 1/2, 1/5; 4-plt. 1/8; Postcards,
1/11 per dozen.

ENLARGING.

4-plt. Card, Singles, 5d.; 3 off 1 neg., 4d.;
6 Assorted, 4d. each.

Postcard Enlargements.—Singles, 4d. each; 6 off
1 neg., 1/7; 12 off 1 neg., 2/3.

Post paid on all work over 2/-, except glass plates.

COMPARE OUR PRICES.
Despatch in 12 hours provided the order is received by first post.

A. J. SHAWYER & CO., Swindon, Wilts.

Developprint

THE DEALER'S SERVICE

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GERALD MORRIS



KODAK SPECIALIST
ROCHESTER

Photopress for Excellence

Send us all your Spools for Developing and Printing. You will satisfy your customers and yourself, by promptness as well as by quality.

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ALWAYS**

PHOTOPRESS

Johnson's Court, Fleet Street, London, E.C.4

PHOTOGRAPHY

Brings Customers to Your Counter



Fac-simile (reduced) of our latest 8-page Illustrated Brochure on Photography. It is one of the many up-to-date novelties we are offering you this season.

THE ILLUSTRATION on this advert is a Specimen we issue of a Photographic Brochure of very special interest to non-photographers as well as beginners. It is written by Harold G. Grainger, the well-known descriptive writer on Photography.

We are specially equipped for producing any printed material for the Photographic trade, and we are anxious that you should inspect our samples of

PHOTO WALLETS
PHOTO ENVELOPES
WINDOW BILLS
HAND BILLS
CIRCULARS
WRAPPERS
CARDS, &c.

THEY ARE ABSOLUTE
BUSINESS BRINGERS!

Samples to the Colonies 10/6, the same is allowed off an Order of £10 and upwards,

We are Pioneers
IN
PHOTOGRAPHIC
ADVTG NOVELTIES
for Chemists

THOMAS WAIDE & SONS

LIMITED

Chemists' — LEEDS —
Printers

MORNY

PÂTE DENTIFRICE OXYGÉNÉE

The frictional constituent is entirely harmless to the enamel and to the gums, and is present in perfect proportion. The Dentifrice is slightly saponaceous in character and is agreeably flavoured with fine French Peppermint.

The only Tooth Paste
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6 dozen Specimen
tubes free with each
gross.



Packed in outers of
12 tubes.

Two Special Outers
for counter display
with each gross.

In tubes to retail at $\frac{1}{3}$ and $\frac{2}{6}$

*The Morny Fine Perfumery Products are an adornment to the
Highest Class Pharmacy and attract the best type of Customer.*

EXTENSIVELY ADVERTISED IN THE PRESS.

Artistic Showcards and Descriptive Pamphlets on request.

Apply for Terms and Prices to

MORNY FRÈRES, 6 NEW BURLINGTON
LIMITED, STREET, LONDON, W.1

THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.
LONDON E.C. 4

APRIL 14, 1923

This Supplement is inserted in every copy of The Chemist & Druggist.

THE CHEMIST AND DRUGGIST SUPPLEMENT REVISED ADVERTISEMENT TARIFF.

Businesses Wanted and for Disposal, Premises to Let, Goods for Sale, and Agencies—6/- for 50 words; every additional 10 words or less, 6d.

SITUATIONS OPEN—6/- for 40 words; every additional 10 words or less, 6d.

SITUATIONS WANTED—2/- for 18 words; every additional 10 words or less, 6d.

Legal Notices, Tenders, Auctions, and all specially-spaced announcements, 1/3 per nonpareil line (12 lines=1 inch single column).

Miscellaneous (Wholesalers') Section for odd and second-hand lots—10/- for 60 words; 1/- for every additional 10 words or less.

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum 2/-

Box Number.

Each case replies may be addressed to a registered number or nom-de-plume, c/o this Office, at a charge of 1/- extra for each advertisement.

Payment.

Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

THE CHEMIST AND DRUGGIST, 42 Cannon Street, LONDON, E.C. 4.

Telephone: Central 3617 (3 lines).

Telegrams: "Chemicus, Cannon, London" (2 words).

CLOSING FOR PRESS.

**ALL ADVERTISEMENTS INTENDED FOR
INSERTION IN THIS SUPPLEMENT**

**MUST REACH US
NOT LATER THAN**

FIRST POST THURSDAY MORNING.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone No.: City 2283.

May be consulted at their Offices on matters of **SALE, PURCHASE and VALUATION**

—LONDON, S.W.—Death vacancy. Light Retail and Dispensing Business; returns, £2,300 per annum; gross profit, per cent.; single-fronted shop, modern window, well fitted stock; good living accommodation; held on lease; rent, sublet £40; price for speedy transfer, £1,750.

—LONDON, N.W. (Busy Shopping Thoroughfare).—Modern fitted Shop, fully stocked; returns, present rate, upwards £50 weekly, with scope to do £100; large shop, double-fronted; 8-roomed house; lease, 21 years; price £2,100, or near or entertained.

—BUCKS.—Family Retail and Dispensing Business, with Milk Agency; returns approach £30 weekly, with scope for increase; modern double-fronted shop; good living accommodation; 21 years' lease; price to be arranged.

—LONDON, S.W.—General Retail Business, with N.H.I. Dispensing, returns average over £2,000 per annum; net profit, per cent.; single-fronted shop, well fitted and stocked; lock-Pharmacy; held on lease, at moderate rental; price £1,550.

—SOUTH LONDON (Good-class Residential Suburb).—Old-established Business, Retail and Dispensing; gross receipts average between £4,000 and £5,000; present rate less; there is good residence, with private entrance; price to be agreed fitably.

—CRYSTAL PALACE DISTRICT.—General Retail Business, with N.H.I. Dispensing, returns, £1,400, at full prices; single-fronted shop, well fitted and fully stocked; good living accommodation; garden; held on lease; rent, £28 per annum; further details on application.

—EPPING FOREST (Near).—Cash Retail Business, present situation, in busy market thoroughfare; returns, under management, between £20 and £25 per week; double-fronted shop, well fitted; 7-roomed house, private entrance, garden; years' lease; price £750.

8.—HOME COUNTY.—Old-established Business, Retail, Dispensing and Photographic; returns, between £2,500 and £3,000; well-fitted shop, heavily stocked; ample living accommodation; garden; new lease at low rental; price £1,900, or near offer.

9.—SOUTH WALES.—Ready-money Business, including N.H.I. Dispensing, with Kodak Agency and Wine Licence; returns last year, £2,200, with scope for extension; net profit, after paying all expenses, £550; lock-up shop; rent, £75; long lease; terms, valuation of stock and fixtures, and sum for lease and goodwill.

10.—SOUTHERN COUNTY (Large Town).—General Retail, Dispensing and Prescribing Business; very old-established; returns last year, £3,255, at usual prices; double-fronted shop; heavily stocked; new lease will be granted at a moderate rental; price to be arranged.

11.—MIDDLESEX.—Retail and Dispensing Business; returns, over £3,000; net profit, 25 per cent.; held on lease at moderate rental; good living accommodation, with side entrance; terms, £2,500, or stock at valuation, and sum for goodwill, lease, and fixtures.

12.—MIDLANDS (Market Town).—Good Family and Photographic trade; old-established Business; turnover, £3,000 to £3,500 per annum; modern shop, good position; stock and fixtures, about £2,250; accept valuation.

13.—NORTH LONDON.—Cash Retail and Dispensing Business, returning at the rate of between £1,500 and £2,000 per annum; single-fronted shop, fitted in mahogany; good working stock; rent £52 per annum; held on lease; no near opposition; offers invited.

14.—KENT COAST.—Retail, Dispensing, and Photographic Business; returns, about £2,000 per annum; net profit, approximately 25 per cent.; scope for increase; living accommodation; moderate rental; held on lease; price £1,100, or near offer.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties and make **Special Terms** for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C. 4

BERDOE & FISH

Valuers and Transfer Agents,

41 Argyle Square, KING'S CROSS, W.C.1

1.—SOUTHERN COUNTY.—Light Retail Dispensing and Prescribing Business; returning nearly £5,000 under management; plenty of scope; important town; price £2,750; references required.

2.—SOUTH COAST.—Sound Light Cash Retail; neglected; present returns approach £1,000; plenty of scope; low rent on lease; price for early sale, £650.

3.—YORKS. (W. RIDING).—High-class Drug Stores, with Photographic; returns, £2,000; no N.H.I.; net profit, £500; main road position; plenty of scope in qualified hands; fully stocked; price about £1,300.

4.—LONDON, S.E.—Good-class Retail Dispensing Business, in good residential suburb, few miles out; returns £3,000, plenty of scope; good house and Pharmacy; price £2,000.

5.—LONDON (WEST MIDDLESEX).—Good Middle-class Cash Retail, very best position; returns last year, £3,250; good profits; excellent house; long lease; fully stocked; price £2,500.

6.—LONDON, W.—Good Middle-class Drug Stores; returns, £750; net profit, £210; scope for increase; large shop, with house attached; price £400.

7.—LONDON, S.E.—Cash Drug Store, in densely populated district; returns over £20 weekly; fine opening for N.H.I.; lock-up shop; fully stocked; price £600 cash, or near offer.

BUSINESSES WANTED.

STOCKTAKING VALUATIONS.

We are now booking dates for May and June, and invite applications for our special terms for doing this work. Our long and varied experience enables us to do the work quickly and without disturbing the general routine of business.

ESTABLISHED 1870.

Telephone: 651 Museum.

The Association of Mnfg. Chemists

— LIMITED —

Head Offices: 28-28 Kimberley House, Holborn Viaduct, London, E.C.1 (and at 2 Bixteth Street, Liverpool).

MARKIN S. BOOTH, Accountant and Valuer PHONE: CITY 6942-43

WE HAVE THE FOLLOWING BUSINESSES FOR DISPOSAL.

1.—DOVER.—Retail Corner Pharmacy in main street; well-fitted and fully stocked. Returns £15 weekly, but could be easily doubled; good scope for general Photo and Optic development; little opposition. Lock-up shop, with store-room and cellar, but living accommodation might be arranged. 20 years' lease at £20 per annum. Price £625 or offer.

2.—SURREY.—Small Manufacturing Business; premises excellently fitted and suitable for factory use; near station. Held on lease, with 18½ years to run, at £60 per annum. Further particulars on application.

3.—MIDLANDS.—For immediate disposal by order of trustee under deed of assignment, small Retail Business, with N.H.I.; stock about £200; fixtures, £150. Returns £10 weekly, exclusive of N.H.I., but good prospects for development, as business was only recently established. Rent, including living accommodation, 14s. per week. Lease might be arranged.

4.—LONDON, N.—Good Retail Business, taking £1,500 per annum; well-stocked and fitted; little opposition. Two good living rooms; 7 years' lease, with rent, £52 per annum; inclusive price, £950.

5.—GOLDERS GREEN.—Finely situated Portrait Studios and Photographic Business; lease 8½ years, at £175 per annum; premises consist of basement, double-fronted shop, and 3 floors above. Full particulars on application to this office.

6.—WANTED.—North of England, or East or West Coast, Retail Chemist and Druggist's Business, with turnover £2,500-£3,000 per annum; or would entertain neglected Business if scope for development; capital available, £1,500. Full particulars to this office.

STOCKTAKING.—Now is the time to take your stock. Perhaps it is too much trouble or you have not the time to spare.

Then why not consult the Practical Firm who will do this work for you for a small inclusive fee, without interference with your work? For full particulars write as above.

ERNEST J. GEORGE

Chemists' Valuer and Accountant.

VALUATIONS FOR INCOME TAX, PROBATE, PARTNERSHIP, TRANSFER,

Carried out in any part of the Kingdom; highest references.

Accountancy.—I specialise in the preparation of accounts for Income Tax purposes. Write me if any difficulty.

3 ST. PAUL'S CLOSE, WALSALL. Tel. 774

FREDK. H. RICHARDS,

Expert Chemists' Valuer, Transfer Agent & Stocktaker, ACCOUNTANCY IN ALL ITS BRANCHES.

8, CHICHESTER HOUSE, CHANCERY LANE, W.C.2.

Phone: HOLBORN 1057.

BUSINESSES WANTED.

ADVERTISER desires to purchase Business, either in country or seaside town; scope for increase; house with garden; state price; must bear strictest investigation; all particulars treated confidentially. Replies to "L. G. S.," 6 Theatre Street, Warwick.

CASH Retail Business wanted, coast or pleasant country town; returns about £2,000 p.a.; position and scope for increase essential; small living accommodation required; must be thoroughly sound and bear strictest investigation; would manage or take financial interest in same, with view early success; cash available; no agents. Brown, c/o Wright, Layman & Unney, Southwark, S.E.

CHEMIST'S Business required in N.W. London; must be good premises and commanding position in good-class locality; suitable premises for same would be considered; immediate settlement; principals only; no agents. 41/21, Office of this Paper.

IN Sussex, at or near the coast if possible, good-class Business in town or country, or neglected Business (with prospect) will either buy or exchange my business; full particulars asked and given; inspection invited. 39/19, Office of this Paper.

GENUINE Chemist Business wanted, with or without living accommodation; turnover £2,000-£4,000. Will undertake management with view to succession. Full particulars in letter confidential. "D.", 1 Lisvane Street, Cardiff.

PHARMACIST desires good-class Business in a healthy locality; turnover, about £2,000; no residence required; would entertain position with view to early Partnership or succession. 42-17, Office of this Paper.

PHARMACIST requires good Mixed Business within the months' time, in small town, N. or E. Riding Yorkshire; turnover, not less than £3,000; cash available. Full particulars in first instance, to 43/2, Office of this Paper.

WANTED to purchase Business situate on dry gravelly sandy soil, South Coast or country, with returns from £35 to £60 per week, with ample living accommodation; must have good saleable stock. Please state full details, in confidence, to Cooper, Chemist, Marsh, Huddersfield.

WANTED, at once, good Drug Store with possession of house attached in good-class populous district; Lancashire preferred; price about £500-£600. Particulars, in confidence, 40/22, Office of this Paper.

WANTED, in West Midlands, Business with over £3,000 turnover; cash waiting. Price, 5 Cross Street, Ellesmere, Sal.

PREMISES WANTED.

SURGEON-Dentist wishes communication with Chemist or Druggist who would be willing to provide room for practice; agreeable to share profits; any part England, but London district preferred. Apply 23/734, Office of this Paper.

SALES BY AUCTION.

Order of Messrs. Henry Lamplough, Limited.

MESSRS. DEBENHAM, TEWSON & CHINNOCKS
will sell, at the Mart, 155, Queen Victoria Street, E.C., on
April 24 (unless previously disposed of by private treaty),

THE GOODWILL AND RECIPE
and the Beneficial Interest, Trade Mark and Rights of
LAMPLOUGH'S PYRETIC SALINE,
having a reputation of over 90 years, and well known as an
allible Blood Purifier and a safe remedy for Fever and
Feveral Troubles. This celebrated preparation is made from
the recipe of the late Henry Lamplough, the well-known Chemist,
during his extensive practice of about 50 years made the
of this Saline the principal feature of his business. It is
stated that by judicious advertising the manufacture and
of this preparation could be considerably extended and the
PROFITS LARGELY INCREASED.

The following Premises, the property of the Company, will
be offered:

113 HOLBORN.—FREEHOLD SHOP and OFFICE PREMISES,
one door from Holborn Circus, comprising Ground
Floor, Basement, and four upper floors. Area, 550 sq. ft. Floor
space, 2,220 sq. ft. VACANT POSSESSION.

58 BLACKFRIARS ROAD.—LONG LEASEHOLD Shop
Warehouse, comprising Ground Floor, Basement and Three
upper Floors. Floor space, 4,350 sq. ft. Lease, 66½ years.
Rent, £25 per annum. VACANT POSSESSION.
Particulars of J. W. ASPREY, Esq., Solicitor, 5 Gray's Inn
Square, W.C.1, and of the Auctioneers, 80 Cheapside, E.C.2.

LEGAL.

ROBERT HUGHES (deceased).

All persons having any claims against the Estate of the late
Mr. Robert Hughes, of Great Oak Street, Llanidloes, in
County of Montgomery, Chemist, are requested to send in
particulars thereof to us, the undersigned, forthwith.

J. & A. DAVIES,

Solicitors to the Administrators.

Llanidloes,
14th April, 1925.

RE MR. GEORGE GREEN DECEASED.

All persons having any claim or demand against the estate
of George Green late of Alford in the County of Lincoln
Chemist and Druggist deceased (who died on the 19th day of
April 1923) are requested to forward written particulars
of to us the undersigned on behalf of the Executors under
will of the said deceased in order that the same may be
examined and if found correct discharged. And all persons
debted to the said deceased at the time of his death are
requested to pay the amount of their respective debts.

By Order of the Executors,

WALKER & CO., Solicitors,
Alford Spilsby and Burgh-le-Marsh.

Alford 10th April 1925.

AGENCIES.

SALES DEVELOPMENT.

CONCERNS desiring to develop the sale
of Proprietary Articles of merit in
London and the South are invited to write
us, Sales and Advertising Service offered;
Travellers engaged and supervised; Accounts
carried if desired, or will act as Buying
Agents; financial interest in sound pro-
positions considered.

Address, Managing Director, Selling
Service, Ltd., Cavendish House, 20 Old
Cavendish Street, W.1.

CONTINENTAL Manufacturer of Surgical Instruments and
Chemists' Sundries is open to appoint a representative
for the British Isles; application is invited from those
established connection amongst Wholesale Surgical In-
struments houses; a thorough knowledge of trade essential. Appli-
cations, giving full particulars, will be treated in confidence.
45/19, Office of this Paper.

ENT, calling on Wholesale Merchants and Grocers in Scot-
land, wishes additional lines, such as Fly Bands, Matches,
Candles; state commission. 38/13, Office of this Paper.

ENTS required for Lancashire, Yorkshire and Scotland to
call on Manufacturers and Wholesalers with Sundries lines
commission only. Write, stating present lines carried and
pry worked, 23/735, Office of this Paper.

PRESENTATIVES with established connections required to
sell popular Proprietary Article on liberal commission basis
tail Chemists in N. E., S.E. Counties and North Wales;
have good references. State present lines, also ground
d. 38/36, Office of this Paper.

VELLER, with a very old connection amongst all the
best Chemists in the U.K., seeks position, or would sell on
commission basis. "A. B.," c/o Hugo & Co., 22 Newman
W.1.

PARTNERSHIPS.

GENTLEMAN wishes to purchase Business, enter into Partner-
ship, or manage with view to succession; over 20 years'
good all-round experience, including high-class Dispensing and
Photographic; unregistered. Apply "Radix," c/o Messrs. Evans
Sons Lescher & Webb, Ltd., Hanover Street, Liverpool.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words
or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this
Office, and forwarded on payment of an additional charge of 1/-.

BERKS.—Retail and Dispensing Business, with small
Veterinary connection; established 1870; returns, 1922,
£2,300; now doing £41 weekly; gross profit, 33½ per cent.;
double-fronted shop, 18 ft. x 36 ft.; large house and garden,
bath room; low rent; over 20 years' lease to run; price £1,600
cash; no part payment entertained. Apply, 23/740, Office of
this Paper.

BRITISH COLONY.—Healthy climate; old-established firm of
Chemists require a capable, qualified man as Managing
Director, to invest £5,000, with view to ultimate succession;
salary, £1,000 per annum, plus commission, and interest on
share capital. Apply, in first instance, to "Progressive,"
P.C.B. 11/5, Office of this Paper.

EAST COAST.—Healthy seaport. Old-established Business on
main road; excellently fitted; 2 large, attractive windows;
turnover averages about £3,000; very profitable; 8-roomed
house attached, with every convenience; rent, £100; lease can
be arranged; price £3,000, or reasonable offer. Further details
on receipt of references. Marsden, 44 Sholebroke View, Leeds.

KENT.—Modern double-fronted corner shop; Cash Retail, with
large Developing and Printing connection; returns, £2,000;
net profit, £475; good, saleable stock; held on lease, with option
of purchase; rent, £52; nearest opposition 1 mile; good reasons
for disposal; price £1,000. Can be viewed on Sunday. 23/741,
Office of this Paper.

LONDON, N., main road.—Good Dispensing and Retail Busi-
ness; returns £1,500 under management; N.H.I. and Kodak
Agency; small living accommodation; no near opposition; rent
£52; price for lease, goodwill, fittings and stock, £850 for quick
sale. "W. A. K.," 40/2, Office of this Paper.

LONDON SUBURB.—Handsomely-fitted Lock-up Shop, with
parlour, in main road, market thoroughfare. Well stocked.
Returns about £1,000. Can do £2,000. New lease. Illness
sole cause of sale. Price £700 or near offer.

Two Proprietary Articles (Mail Order or Retail) for Sale. Full
particulars, Fredk. H. Richards, Valuer, 8 Chichester House,
Chancery Lane, W.C.

SOMERSET.—Country town and wide district; no opposition;
old-established Business; owner retiring, ill-health; average
takings £25 weekly; also Photographic Business; capable large
expansion; excellent situation; freehold house, garden, shop
fittings, stock and goodwill, about £2,000. Apply F. S. Ingle,
Solicitor, 42 Milsom Street, Bath.

SOUTH COAST.—Fashionable health resort. High-class Phar-
macy, main road, splendid central position; close important
opening and building scheme on grand scale; magnificently fitted
and stocked on modern store lines; lock-up shop, 52 ft. long, 18
wide; space and scope for Library, also Optics; Kodak Agency;
recently established, and now showing handsome prospects; oppo-
sition negligible; price £3,000. Write, 42/6, Office of this
Paper.

YORKS, SOUTH.—Cash Retail and Dispensing; old estab-
lished; Rexall Agency; turnover last month, over £200;
single-fronted shop; opening for Optics, only one Optician in
town of 20,000; house attached; lease can be had; rent £79;
price £1,100. C. C. Marsden, 44 Sholebroke View, Leeds.

DRUG Stores, main road, corner position, S.W. suburb, in
good rising neighbourhood; established 7 years; average
trade, about £16, with big scope for increase; lease 7 years to
run; rent, £40; accommodation, 8 rooms; well fitted; electric
light and good windows; illness sole cause; price for quick sale,
£400 stock at valuation; bargain. 42/39, Office of this Paper.

EXCEPTIONAL opportunity for qualified man.—Pharmacy
(lock-up), main road, S.E.; returns over £1,000; business
not fully developed; fully stocked; no N.H.I. or Photography;
price to be agreed. Apply, "Bargain," 42/13, Office of this
Paper.

EXCEPTIONAL Offer.—Wholesale Drug, Patent Medicine,
and Syphon Business in West Riding Yorkshire; turnover
£6,000, over 300 customers; syphon sales, 80 dozen (40-oz.
size) weekly; a really sound profit-earning proposition. Partic-
ulars from 23/729, Office of this Paper.

FOR SALE, first-class Chemist's Business, Dispensing and Retail, in Middle Counties; returns over £2,000; good house; lease; early entry; full particulars on application. Apply, 42/32, Office of this Paper.

FOR SALE, an old-established Family Business; proprietor of same disposing owing to ill-health. Apply Felton Grimwade & Bickford, Perth, Western Australia.

FOR SALE.—The high-class and very old-established Business of Clare & Hunt, Chemists, Scarborough. Apply, W. S. Robinson & Coulson, Chartered Accountants, Scarborough.

GENUINE Cash Business for Sale; established over 30 years; present owner retiring; returns £5,000; stock £1,200; rent £60; London suburb; plenty of scope for increase; best offer over £3,600 cash secures. 37/21, Office of this Paper.

GOOD, old-established, profitable Business in Yorkshire, Sheffield district; very low expenses; held on lease; between two big Surgeries; turnover, £2,000; living accommodation; well recommended by good Wholesale houses; price wanted, £1,050. Apply, 42/15, Office of this Paper.

LOCK-UP Shop and one room in thickly-populated working-class district in North London; no opposition; N.H.I. recently added; rapidly increasing; good reason for leaving; splendid chance; price inclusive, £250, or near offer. P.C.B. 26/11, Office of this Paper.

TO CHEMISTS AND DRUGGISTS.

TO be disposed of as a going concern, the Business of a Chemist and Druggist, carried on by Mr. R. E. Harp, of 273 Duke Street, Fenton, Stoke-on-Trent.

The House, Shop, and Premises, which are included in the offer for Sale, are well appointed and in a good state of repair, whilst the Fixtures, Fittings, and Effects are practically new, and are well adapted to the trade. The Stock-in-trade, all of which is of recent purchase, is well kept and of a variety readily saleable.

The Business has a good connection, and is capable of extension.

Offers for the Business in its entirety, or for any portion thereof, may be submitted.

For further particulars and to view, apply to Messrs. Bourner, Bullock and Co., Chartered Accountants, Albion Street, Hanley, Stoke-on-Trent, to whom offers may be delivered not later than 10 a.m. on Thursday, the 26th April, 1923.

Neither the highest nor any offer will necessarily be accepted.

£250 CASH.—For immediate disposal, Chemist's Business, with N.H.I., in London, E.1 district; well stocked; reasonably fitted; open 12 months only; present returns £550; capable of considerable increase; rent and rates equal £52; good living accommodation; long lease; satisfactory reason for disposal. Apply 40/28, Office of this Paper.

£800 OR nearest will secure a splendid unopposed neglected Business in the Midlands; population over 7,000; modern double-fronted shop, good living accommodation; electric light and gas, hot and cold water; N.H.I. scripts for last three months, 1,650; present cash takings, £20 per week, has done £40. Apply, 43/18, Office of this Paper.

£1,350 WILL purchase Pharmacy and Freehold Premises situated in one of the principal streets of St. Helier; low rates; no income tax; good position. "H.," 7 New Bath Street, St. Helier, Jersey.

SITUATIONS OPEN.

[HOME.]

RETAIL.

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

BERMONDSEY, S.E.—Unqualified Assistant required; quick and accurate Dispenser; good references essential. Austins, Ltd., 1 Spa Road, Bermondsey, S.E.16.

BIRMINGHAM (district).—Qualified Assistant wanted at once; active, energetic, and competent at Counter; N.H.I. Dispensing; medium-class light Business. Apply, with full particulars, salary required, etc., in first instance, 42/28, Office of this Paper.

BRADFORD.—Unqualified Junior for good-class trade. Apply, with very full particulars and photograph, to M. Rogerson & Son, Ltd., Chemists, Bradford.

BRISTOL.—Assistant, middle-aged or elderly, mainly for Dispensing and assist at Counter when required; outdoors; state age and salary required. "M. I. B.," care of Mr. Willis, 11 Marston Road, Knowle, Bristol.

BRIGHTON.—Junior, competent, unqualified, of good appearance and address for modern store business. Must be a pushing Salesman, also fasteful Window and Interior Dresser. State full particulars of age, height, experience, and salary required in first letter to Lion Drug Stores, Ltd., Head Office, 75 West Street, Brighton.

DEVON.—Managing Assistant, qualified, for branch shop; age 30 to 40. Particulars of experience and usual terms, plus and copies of two recent testimonials. Norman V. Stow, L. Chemists, Newton Abbot.

LIVERPOOL.—Capable Assistant, able to take charge; must have smart appearance, be good, reliable Dispenser; knowledge of Counter Prescribing an advantage; age 28-38; of those who are seeking permanency with some prospect in applying; duties to commence May 7. Apply and send reference to "R. L.," 41/2, Office of this Paper.

LONDON, E.—Small limited company requires smart man to act as Superintendent; accustomed to N.H.I. and General Trade; indoors or out; or elderly Chemist entertained for supervision only. 43/16, Office of this Paper.

LONDON, N.1.—Unqualified Assistant required, about 25; must be a reliable Dispenser and a capable Salesman experienced in Photography; good appearance and address. Apply, with full particulars and salary required, to 42/3, Office of this Paper.

LONDON, N.W.—Junior Assistant (gentleman) wanted; French speaking preferred; must be a thoroughly capable, quick Dispenser and have knowledge of Photography. Applying full particulars, age, experience, wages, etc. 42/16, Office of this Paper.

LONDON, N.W.—Unqualified Assistant wanted, principally for high-class Dispensing; good experience essential; age 25 state full particulars and salary required. Applications answered in four days respectfully declined. 42/19, Office of this Paper.

LONDON, S.E.—Vacancy occurs in an old-established business for a young qualified Assistant; must be energetic and experienced in counter practice, with ability to make a good window display. Apply, with full particulars and salary required Brooks' Drug Stores, 509 New Cross Road, S.E.14.

LONDON, S.E.—Qualified Manager required for working-class business with plenty of N.H.I. Dispensing; permanent progressive berth; house attached. "London," 43/24, Office of this Paper.

LONDON, S.W.—Junior Assistant wanted; unqualified; must be a good Dispenser and Counterman, and well up in Photography; single man under 30 preferred. Apply personally, send full particulars to Enness, Chemist, 91 High Street, Westminster, S.W.18.

LONDON, W.—Manager (outdoors) required; age 27 to 30; previous experience in a first-class business essential; must be an expert Salesman and Window-dresser, with a thorough knowledge of Photography. Apply, giving full particulars 43/10, Office of this Paper.

LONDON, S.W.—Junior Assistant wanted for N.H.I. Dispensing and Counter; must be a quick and accurate Dispenser also Improver or Junior for Stock and Counter. Apply, with references and salary required, to 23/737, Office of this Paper.

LONDON.—Assistant required; age from 25 to 35; must be an accurate Dispenser, smart Salesman and Window-dresser with Photographic knowledge. Apply by letter, giving full particulars, to 23/743, Office of this Paper.

LONDON.—Manager required; age 26 to 40; must be a Salesman and Window-dresser, with thorough knowledge of Toilet and Sundries side of business, and Photography. Apply by letter, giving full particulars, to 23/744, Office of this Paper.

MANCHESTER.—Wanted, unqualified Assistant for medium-class Cash Retail Business; knowledge of Photography essential; state age, height, experience, copies of references, and salary required to Lockwood, Chemist, Harpurhey, Manchester.

MANCHESTER.—Assistant, unqualified, for Counter, with N.H.I., good Window Dresser, lady or gent. Send copies of references; state age, salary, experience, etc. Local post preferred; permanent position. Apply by letter, and address "Private," Alfred Whalley, Ltd., Chemists, Newton Heath.

MANCHESTER.—Qualified Manager for working-class business; permanency, with an interest in the profits of the business to steady and reliable man. "M. C.," 43/242, Office of this Paper.

MIDLANDS.—Qualified Manager required immediately; excellent opportunity for smart, energetic, young man. "M. C.," 43/240, Office of this Paper.

MIDLANDS.—Wanted, Qualified Assistant; must be used to quick Cash Trade; amiable and obliging manner; must be a Window-dresser and not afraid of work; state salary expected if disengaged, and all particulars, with photo if possible. Apply, 43/180, Office of this Paper.

NORWICH INFIRMARY.

DISPENSER required four hours daily; Minor qualification of Pharmaceutical Society and some knowledge of Bacteriology essential; salary £2 weekly. Apply in writing, stating age, sex, experience, etc., with copies of testimonials, to
E. J. W. HUGGINS,
 Clerk to the Guardians.

St. Andrew Street, Norwich.
 6th April, 1923.

RHONDDA Valley.—Qualified Manager, married, required for usual Light Retail and Dispensing (N.H.I.) business; permanent and progressive berth; house attached; must be a Welshman. "Rhondda," 43/241, Office of this Paper.

SHEFFIELD.—Immediately, thoroughly competent, experienced, gentlemanly Assistant for light Retail, Dispensing and Photographic business; about 24 years of age. Full particulars age, experience, salary, etc., to 43/20, Office of this Paper.

SOUTH WALES.—Male Assistant required, outdoors; experienced and accurate Dispenser; must be a good Window-dresser; smart appearance. Send full particulars, enclosing recent references, to Gilbert Thomas, Chemist, Risca, Mon.

SUFFOLK Seaside Resort.—Junior Assistant or Improver wanted for Photographic Department. State age, height, salary (indoors or outdoors), when disengaged, and name of last employer. 43/23, Office of this Paper.

YORKSHIRE TOWN.—Manager wanted for old-established Drug Stores; excellent opening and prospects for qualified man prepared to invest £500 to £750. Full particulars to 38/32, Office of this Paper.

YORKSHIRE Cathedral City.—Wanted, capable Junior Qualified Chemist at once; reasonable hours; no Sunday duty. Applications not answered 7 days, courteously declined. Apply, stating experience, salary required, good references essential, to 42/23, Office of this Paper.

YORKSHIRE.—Book-keeper and Dispenser required by Chemist; one with shop experience preferred, but not essential; must be able to use typewriter; state age, experience, etc., and salary required. 42/36, Office of this Paper.

ASSISTANT, 25-35; tall, energetic, of smart appearance; must be a good Salesman, and possess a competent knowledge of Kodak Photography; Window-dressing experience an advantage; good references essential. State usual particulars, salary required, when disengaged. Chater, Chemists, Watford.

DISPENSER required at the Norfolk Mental Hospital; must be fully qualified; salary £180 per annum, rising to £200. Appointment is subject to the Asylums Officers' Superannuation Act. Applications, with full particulars and copies of three recent testimonials, to be sent to the Medical Superintendent, Norfolk Mental Hospital, Thorpe, Norwich, as early as possible.

EXPERIENCED, unqualified Male Assistants required, from 25 to 35 years of age. Apply by letter, Boots Pure Drug Co., Ltd., Station Street, Nottingham.

EXPERIENCED Dispenser (male), qualified, for two weeks from April 30; outdoors; full particulars, age, height, salary, etc.; photo; or interview if possible. Salter, M.P.S., West Norwood, London, S.E.

EXPERIENCED Photographic Assistant required in Photographic and Optical business in North of England; good salesman; able superintendent D. and P. department; knowledge of sight testing desirable. Apply, giving particulars, experience, age, salary required, when free. 41/36, Office of this Paper.

JUNIOR Assistant required, smart appearance; good Window-dresser; Counter, Dispensing, and Photographic experience essential. State age, experience, salary required, with photo, to 23/735, Office of this Paper.

JUNIOR required, just out of apprenticeship; knowledge and ability of N.H.I. and Photographic work an advantage. State salary required (outdoors), height, and fullest particulars in first letter to Smith, Chemist, c/o Gibson, Ltd., 359 Portswold Road, Southampton.

JESSOP HOSPITAL FOR WOMEN, SHEFFIELD.

PHARMACIST required; lady preferred; must be M.P.S.; previous Hospital experience desirable. Full particulars may be obtained on application to the Secretary.

LOCUM, qualified, reliable, trustworthy man, medium-class trade, for week April 30 to May 5; possibility of further engagement for 2 to 3 months. State experience, references, and salary required.—Goodall, Chemist, 182, Ealing Road, Wembley.

MESSRS. COOPER SON & CO., LTD., require a young qualified Assistant of good address; London experience in the best type of business an advantage; knowledge of Counter and Window Display desirable. Apply, with full particulars, to "B. S.," 24 Sloane Street, S.W.1

MANAGER for Rickmansworth branch; must be thoroughly reliable and experienced; about 30; a good Window-dresser, with Photographic knowledge; tactful and obliging with customers; accommodation could be provided. Apply by letter, giving full particulars, to Parke's Drug Stores, Ltd., 65 Harwood Street, Chalk Farm, N.W.1.

QUALIFIED Assistant wanted for evening work and Saturday afternoons; elderly gentleman not objected to. Apply, stating salary, etc., to 23/747, Office of this Paper.

QUALIFIED Optician, with some knowledge of Pharmacy, required for South Yorks.; must have good credentials and experience and sound knowledge of objective method of Sight-testing. Apply, giving full particulars of experience and salary required. Apply, 40/40, Office of this Paper.

QUALIFIED male Assistant, unmarried, not over 30, for good-class Dispensing and Light Retail Business. Please state age, height, experience, and salary required, to Prebble and Bone, Chislehurst, Kent.

QUALIFIED Manager (single) required for relief work, May 1 to September 30; must be good Counterman and Dispenser, and have knowledge of Photographic; possible permanency if satisfactory. 43/243, Office of this Paper.

RELIABLE Assistant required for Dispensing and Mixed Country Business; single; unqualified. Apply, giving particulars as to age, experience, salary required, and state when at liberty, to Reynolds & Johnstone, Chemists, St. Mary's Street, Wallingford, Berks.

SCOTCHMAN, with previous West-End experience; qualified; accurate Dispenser and tactful Counterman. Usual particulars, including recent references and salary (outdoor) required to 41/16, Office of this Paper. Replies not answered in a few days respectfully declined.

SMART Junior Assistant, for quick Retail and Dispensing business; must be good Dispenser. Martyn's Stores, Ltd., Wolverhampton.

SMART, unqualified Assistant required at once for working-class Business; also Junior; must have thorough knowledge of the business, and undeniable references. Apply, 3 Ridgmount Street, Tottenham Court Road, W.C.1.

VACANCY for Junior Assistant, male, at end of month in good class business. Charles Pratt, Chemist, Warwick.

WANTED, an experienced Pharmacist of gentlemanly appearance and address for permanent, progressive post as Senior Assistant in a high-class business; first-class Dispensing experience necessary, and undeniable references essential. Please state fullest particulars, salary required, and enclose photograph. 41/18, Office of this Paper.

WANTED, qualified man, not over 25, in Midland town. State salary required, experience and references. "C. J. W.," 43/25, Office of this Paper.

YOUNG Junior Assistant required at once for good-class Dispensing and Photographic Business; must have practical knowledge of Developing and Printing; senior kept; indoors preferred; state full particulars of experience and salary expected. Oldham, Rexall Chemist, Eton, Windsor.

WHOLESALE.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

A PROVINCIAL Wholesale House require a qualified Chemist conversant with and able to take charge of Waiting Order, Capsule Making and Surgical Instrument Departments; one with a thorough knowledge of Truss Fitting will be given preference. Apply 23/742, Office of this Paper.

LANCASHIRE Firm of Wholesale and Retail Chemists supplying drug stores and small shops have a vacancy for a smart and energetic man as Traveller, able and keen, to tackle new ground; salary and commission; send full particulars first letter. Apply, 40/29, Office of this Paper.

LONDON.—Salesman wanted to work and extend existing connection and sell Bulk and Packed Goods among Chemists in part London and Eastern Counties; remuneration by arrangement; only live, energetic men need apply, giving full details as to experience, territory covered, salary required, and when available, in confidence. 23/738, Office of this Paper.

POWDER Puffs.—20% commission. Manufacturers require London and provincial Travellers with extensive connection amongst Chemists, Perfumers, Stores, etc.; valuable territory open; competitive prices; previous puff selling experience essential. Full particulars in strict confidence. 42/25, Office of this Paper.

REPRESENTATIVE for North and South Wales wanted by Northern Wholesale Drug House; experience necessary; state age, qualifications and salary required. Apply, 40/23, Office of this Paper.

REPRESENTATIVE wanted for old-established firm; salary and commission; applicant must be capable of maintaining and extending connection; good references required. Apply first place "Duroi," 42/12, Office of this Paper.

REPRESENTATIVES, already calling upon Chemists anywhere, are invited to write for details of good paying proposition; no outlay; no trouble, and no samples; applications treated in strict confidence. "Chemist," 34 Cawdor Road, Fallowfield, Manchester.

REPRESENTATIVES required, on commission basis, for Essex, Herts, Bucks, Berks, Gloucester, Wilts, Somerset, Dorset, Devon and Cornwall to carry extensively advertised Rubber Goods. Those having live trade connections please apply to P.C.B. 24/26, Office of this Paper.

REPRESENTATIVES, already calling upon large Wholesale Chemists throughout the country, required to carry three small fast-selling lines upon liberal commission. Write P.C.B. 26/12, Office of this Paper.

REPRESENTATIVE required for introducing high-class Proprietary Lines to Medical profession. State experience and salary required to P.C.B. 26/10, Office of this Paper.

SOUTH WALES AND WEST OF ENGLAND.—Representative with live connection wanted immediately for the West of England by well-known and old-established firm specialising in Pills and Tablets; commission basis; part-time not objected to if other lines do not clash. Applications, giving full particulars, will be treated in strictest confidence. 23/739, Office of this Paper.

SURGICAL INSTRUMENTS.—Smart young man for Yorkshire as Order Clerk and Assistant; one who has had experience in sundries and dressings preferred. Reply, stating full particulars as to salary expected, etc., to 23/736, Office of this Paper.

SIDE-LINE in Perfumery.—Representatives wanted to carry ready seller; liberal commission. Apply 23/746, Office of this Paper.

TRAVELLER.—Old-established firm of Chemists' Sundriesmen require good Traveller with sound connection S.E. and S.W. London and district. None but first-class men need apply, giving full particulars, in confidence, to 23/732, Office of this Paper.

WANTED, by a firm of Manufacturing Chemists dealing in Medicinal Tablets and Drugs, Representatives for the following districts:—

- No. 2. Cheshire, Shropshire and Staffordshire.
- No. 3. Derbyshire, Nottinghamshire and Lincolnshire.
- No. 4. Hereford, Worcestershire, Warwickshire, Leicestershire and Rutland
- No. 5. Northamptonshire, Bedfordshire and Huntingdon.
- No. 6. Norfolk, Suffolk and Cambridge.
- No. 8. Oxford, Gloucestershire and Berkshire.
- No. 9. Cornwall, Devon and Somersetshire.
- No. 10. Wiltshire, Dorset and Hampshire.

Liberal commission will be allowed. Write 23/731, Office of this Paper.

[COLONIAL, INDIAN AND FOREIGN.]

PARIS.—Qualified English Assistant wanted immediately. Please state age, experience, and references. "H.," 41/12, Office of this Paper.

SITUATIONS WANTED.

RETAIL

[HOME.]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

A.A.A.—ASSISTANT, 21; tall, smart appearance; thoroughly experienced in high-class Counter, Window-dressing, Dispensing and Photography; Kent, Surrey or Sussex preferred. "Zingiber," 3 Crown Street, Eastbourne.

A.—AS Assistant, with good all-round experience of good-class; single; unqualified; references excellent; Photography, Window-dressing. Write 40/36, Office of this Paper.

A CAPABLE, experienced Dispenser wants post; "Hall" woman; disengaged. Mrs. Russell, 41 Great Ormond Street, W.C.1.

A QUALIFIED, thoroughly experienced woman Dispenser wants post. Doctor, Institution, lock-up Surgery; would reside latter; Locum booked; moderate salary. "Dispenser," 108 Lower Richmond Road, Putney, S.W.

A QUALIFIED young lady, 4 years' excellent Dispensing and Counter experience; highest references; Brighton or district. Dale, 31 Highdown Road, Brighton.

AS Assistant or Senior for Locum work, or permanency entered; disengaged very shortly; first-class all-round experience; unqualified; elderly. 42/9, Office of this Paper.

AS Dispenser.—Gentlewoman desires post; thoroughly experienced; permanent-locum. "B.," 152 Kensington Park Road, Notting Hill, W.11.

ASSISTANT, active Senior, 40; single; high-class business preferred; very best experience and references; Counter, Window-dressing, Dispensing, Photography. Apply "Veritas," 18 Cavendish Avenue, Eastbourne.

ASSISTANT, 28, single, unqualified, experienced in good-class Dispensing and Counter work; knowledge of Photography; highest references. Yardley, Tai Clawdd, Ruabon.

ASSISTANT; temporary or permanent; unregistered; age 45; 7 years present berth; Dispensing, Photography; active; all-round experience. "W. H.," 7 Windsor Place, The Hoe, Plymouth.

ASSISTANT, studying, 10 years' excellent experience in all branches of Pharmacy, desires part-time employment in S.W. London. "Assistant," 28 East Hill, Wandsworth.

ASSISTANT; disengaged; exceptional experience; successful Drug-store manager; temporary, permanent; unqualified; 43. "Chemist," 11 Kingsdown Road, Holloway, N.19.

ASSISTANT; unqualified; accurate and reliable; single; 24 years' London, country and seaside experience. "Chemicus," 48, Balham Park Road, Balham, S.W.

ASSISTANT, 31, married, unqualified, thoroughly experienced in all departments of the Retail, requires a permanent situation; capable to take charge; excellent references; disengaged April 31. "Aspirin," 17 Park Avenue, Aylestone Park, Leicester.

ASSISTANT or Locum; 31; unqualified; 13 years' experience in the Retail; Photography, Counter, Dispensing; capable taking charge; excellent references. "Rhei," 41/37, Office of this Paper. Will advertiser kindly send name to this office?

ASSISTANT, 26; quick Dispenser, efficient Salesman and Window-dresser, complete knowledge of Photography; excellent references; South preferred. 42/31, Office of this Paper.

ASSISTANT, 23, 7 years' Retail and Dispensing, studying for Part II., requires part-time employment in South London; afternoon and evening preferred. R. L. Russell, 245a, Magdalen Road, S.W.18.

BIRMINGHAM district.—Qualified (pre-war), tall, exceptional experience, Photography, Optics, desires permanency; reasonable salary. "Chemist," 20 Hamstead Road, Birmingham.

BRANCH Manager, qualified, married, 33, 17 years' all-round experience, including management. "Pharmacist," 28 Agnes Grove, Liscard, Cheshire.

BRANCH Manager, age 48, qualified, energetic, reliable, and trustworthy; excellent references. 40/14, Office of this Paper.

BRANCH Manager or Assistant; unqualified; 53; Dispensing, Counter; salary moderate; London only. "Hodie," 15 Fletching Road, Clapton, E.5.

CHEMIST desires summer appointments as locum; Midland or Eastern Counties. At present c/o Garrad, Chemist, 144 Parade, Leamington.

CHEMIST, 30, married, experienced, energetic, knowledge of Photography, good Dispenser, seeks engagement; Wholesale or Retail; disengaged: 1 Altham Road, West Derby, Liverpool.

DISENGAGED; part or full-time locum or permanency minor man; varied experience; moderate terms. "Chemist," 3 Regina Road, Ealing, W.13.

EXPERIENCED Assistant, accustomed to good Dispensing and Retail; unqualified; middle-aged; no objection to working-class trade; London. 43/3, Office of this Paper.

G. D. SAWDON, M.P.S., can thoroughly recommend his assistant to anyone requiring a really reliable and accurate Dispenser, good Counterman and Window-dresser; practical knowledge of Kodak Photography; South Coast (preferred), West End, or City; age 20. Laws, 35 Lyndhurst Drive, Leyton.

JUNIOR or Improver, 18; just completed 3 years' apprenticeship; Counter, Dispensing, Window-dressing; well recommended. Hopkinson, 41 Commercial Street, Todmorden, Yorks.

JUNIOR (lady, 23) requires situation; in or near London preferred; 5 years' good-class experience, Counter and Dispensing; capable, energetic; disengaged. Hawkes, 1 Birch Villas, Sandgate, Kent.

JUNIOR Assistant, 5 years' experience South Coast and West End; Dispensing, Counter, Photography, Window-dressing; smart, energetic, trustworthy. 40/19, Office of this Paper.

JUNIOR, 20, seeks post; 7 years' previous experience; good reference; London or suburbs preferred. 40/20, Office of this Paper.

LADY Assistant; unqualified; 7 years' experience, Retail and Dispensing; good references; age 24. Rayne, 330 Cowley Mansions, Mortlake.

LADY Dispenser, Book-keeper; Hall Certificate; 6½ years' Hospital; excellent testimonials; whole or part-time; Doctor or Institution. L. Collins, c/o Dr. Moxon, Gainsborough.

LADY Dispenser (Hall) requires post anywhere; Book-keeping; good experience with Doctors; small salary. Apply 65 Mayfair Avenue, Ilford, Essex.

LADY Dispenser-Book-keeper (Hall) desires post, Doctor, Institution; Hospital and Surgery experience. "Dispenser," 10 Gauden Road, Clapham, S.W.4.

LOCUM Tenens; disengaged; over 30 years' qualified and wide experience; highest credentials; efficient service; moderate terms; bookings forward; emergency, relief, Hospital, Pharmaceutical. Smith, 33 Albert Street, Warsop, Mansfield.

LOCUM, qualified, booking up for Cornwall and Devon, or Westmorland areas. Apply Bulls, Little Trevarrack, Lelant, Cornwall.

LOCUM or Manager, qualified; wide experience Photography, Optics; expert Salesman; disengaged. "Locum," 55 Paisley Road, West Southbourne, Bournemouth.

LOCUM, qualified, 10 years' experience; open for summer months. J. W. Mosley, Rufford Road, Milnsbridge, Huddersfield.

LOCUM or Senior; good London and Provincial experience; qualified. F. Johnson, 208 Arkwright Street, Nottingham.

LOCUM; disengaged April 14; qualified; 17 years West-End and Continent; excellent references. "Linguist," 160 Marylebone Road, N.W.

LONDON.—Young lady, 8 years' experience, Dispensing, Counter, high-class Toilet, desires re-engagement. 39/16, Office of this Paper.

MANAGER, energetic; excellent all-round experience; middle-aged; moderate salary; qualified. 40/140, Office of this Paper.

MANAGER, Senior; trustworthy, reliable; experienced all classes and branches; well recommended; present Locum. "Chemicus," 79 Cecil Street, Manchester, S.

MANAGER or Locum; qualified; 30 years' experience, including management; 11 years last situation. "Chemist," 19 Ruthven View, Leeds.

MANAGER; qualified; town, country and West-End experience; Photography and Optics; last 10 years as Branch Manager; age 34; height 6 ft.; married. P. Grimshaw, 49 Corporation Road, Grimsby.

MR. BUCKLEY, Chemist, formerly of Kensington, open to Locum engagements, Hospitals, Doctors, Pharmacists. 13 Gatwick Road, S.W.18.

M.P.S., F.S.M.C., aged 30, requires permanency; excellent Pharmacy. 43/9, Office of this Paper.

PART-time; qualified; London district; disengaged Tuesdays, Wednesdays and Saturdays; 1s. 9d. per hour. Summers, 98 Greyhound Lane, Streatham Common, S.W.

PART-time position desired (male); aged 22; energetic; seven years' experience; Dispensing, Photography, Counter; London preferred. "Statim," 42/5, Office of this Paper.

PHARMACEUTICAL Chemist, 25; single; 3½ years' war service; sound theoretical and practical experience; Liverpool district preferred. M.L. 812/23/3, Office of this Paper.

PHARMACIST, 28, single, 5 ft. 9 in., Scotchman, desires post as Manager, Assistant or Locum; 3½ years present situation, expiring April 21; smart, energetic; excellent Dispenser; keen Salesman; knowledge Photography, Optics; S.W. England or London preferred. Wm. Pope, c/o Fairchild, Honiton, Devon.

PHARMACIST (38); first-class Retail and Dispensing experience; conscientious and reliable; abstainer; accustomed to control or represent; London. Replies to 42/18, Office of this Paper.

QUALIFIED desires post, Manager or Locum; experienced all branches; smart Counterman; disengaged. "M.P.S.," The Holm, Hale Road, Farnham.

QUALIFIED Chemist, elderly; Hospital or Institution; 11 years' Hospital experience. "Chelsea," 22 Bramerton Street, Chelsea, S.W.3.

QUALIFIED Assistant, 23; tall; London district; Dispensing, Counter, and Photography; excellent references. "R.," 26 Beckwith Road, Herne Hill.

QUALIFIED; Manager or Senior, 25; London and provincial experience; first-class Dispenser, Window-dressing, Photography; excellent references; disengaged May 21; could invest small capital. "Square," 8 Calthorpe Street, W.C.

QUALIFIED, 21½; disengaged; energetic; Dispensing, Counter; Photographic experience. "Chemicus," 32 Leopold Road, St. Andrew's Park, Bristol.

QUALIFIED (1906); single; good all-round experience; temporary or relief; disengaged April and May. "H. S.," May Cottage, Hambrook, Emsworth, Hants.

QUALIFIED (28), desires post; all-round experience; London and Provincial. "Pharmacist," 25 Old Town, Clapham, S.W.4.

RELIABLE, trustworthy man; good references; unqualified; Dispenser, Salesman; season engagement; £3 10s. weekly. "Disengaged," 82 Campden Street, Kensington, W.

REGISTERED, elderly; branch, small; super Prescriber, etc.; at liberty; moderate salary; good testimonials. Address "D.," 5 Walter Street, Idle, Bradford.

SMART, up-to-date, unqualified Assistant, who is thoroughly experienced in all departments of the retail trade, requires a permanent situation; sound references; age 38. "Trustworthy," 54/14, Office of this Paper.

THOROUGHLY reliable business man desires permanent position of trust; varied experience; 29; married. "Vita," 8 Jury Street, Warwick.

TYNESIDE.—Unqualified Assistant seeks berth; first-class references; Dispensing, Stock, Photography and Salesmanship; worker. "Capsicum," 197 Gilesgate, Durham.

UNQUALIFIED, 30, desires change; good all-round experience; quick Counter, Dispensing, Photographic, Window-dresser; excellent reference; 11 years with present employer. Phipps, 24 Bective Road, Putney, S.W.

UNQUALIFIED Assistant, quick, honest, reliable. 5 ft. 8 in.; London experience; referred in Minor. 56 Lansdowne Gardens, Clapham, S.W.

WANTED, situation as Manager in Midlands; qualified; married; excellent references; permanency; moderate salary. 40/141, Office of this Paper.

UNQUALIFIED; single; 9 years' London experience in private and N.H.I. Dispensing; also Counter work; good reference. C. S. Judge, 40 Hedley Street, Maidstone, Kent.

£2 weekly; Retail, to gain further experience; knowledge of Dispensing, Book-keeping, Photography; references. "Energetic," 18 Grenfell Road, Maidenhead.

£3 WEEKLY.—Assistant, outdoor; unqualified; town and country experience; good all-round man; abstainer; 16 years West-End. "Cortex," 390 Clapham Road, S.W.9.

WHOLESALE.

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/.

A.R.C.S., B.Sc., 1st class hons., 22; Public School education; French, German, fluent, some Russian; experience as Assistant in Research Laboratories and with Gas Company. M.L. 53201, Office of this Paper.

A REPRESENTATIVE with extensive live connection Chemists and Stores, Lancashire, Cheshire and North Wales, open for appointment; first-class record; references. R. Woodward, 35 Brownhill Road, Blackburn, Lancs.

ADVERTISER, 40; thorough Retail and Traveller's experience; good appearance and address; any capacity. "Chemicus," 79 Cecil Street, Manchester, S.

AN experienced Traveller in Essential Oils, etc., is desirous of fixing up with a house of repute; salary and commission. P.C.B. 25/23, Office of this Paper.

AS Assistant Chemist (Works or Research), 24, B.Sc. (Hons.), London; good knowledge of French, Physics and Maths.; 3 years' war service; willing to take any position to suit qualifications. M.L. 4467/22, Office of this Paper.

CUFF'S FLY OIL

For Maggots in Sheep.

The cure for this troublesome complaint that has stood the test of nearly a hundred years.

Write for lowest carriage paid terms
and Window Show allowance.

J. H. CUFF & SONS, *Wholesale Chemists
and Druggists,*
(Harcombe Cuff Ltd.)
453 Caledonian Road - - London, N.7.

ASSISTANT, 41; married; knowledge of Optics, Photography, Surgical Goods, Wholesale Dry Salting, Pickles, Sauces and Jam Making, Packed Goods; experience of Mineral Water trade, including making of Cordials, Non-alcoholic Beverages and Essences; has experience Traveller in above in North of England and South of Scotland; willing to take any position. M.L. 99264, Office of this Paper.

ASSISTANT Chemist (Works, Laboratory), 28, Public School, B.Sc. Inter. (Lond.); French fairly fluent, some German; scientific knowledge both languages; has had some commercial experience; willing to take any post. M.L. 4772/22, Office of this Paper.

ASSISTANT Manager or Secretary, 34, B.A.; married; training in Engineering and Chemistry; 3 years' experience Government Training Department; expert training and experience with paper-making firm as Chemist and Manager; good organiser and disciplinarian; excellent references and testimonials. M.L. 1606/23, Office of this Paper.

BACTERIOLOGIST and Pharmacist, 28; 5 years' war service; M.P.S.; 5 years' Laboratory experience in Bacteriology; willing to take any post. M.L. 1456/23, Office of this Paper.

CAPABLE man, 35; disengaged; Wholesale or Retail; 20 years' Stores experience; Counter or Stock; thorough knowledge Patents, Surgical, Sundries. R. Tyler, 84 Montholme Road, Wandsworth Common, S.W.

CAPABLE Assistant (26) desires post with Manufacturing firm; previous experience as Warehouse Manager and with Medical firm; Book-keeping; well educated; trustworthy; references. "F. G.," 18 Grenfell Road, Maidenhead.

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The Maharajah went to the hospital to undergo X-ray examination for stomach trouble. It was decided to administer barium sulphate with milk in order to watch the digestive process.

The drug was not in stock, and was ordered from a druggist's store. The druggist, it is stated, supplied barium sulphide, labelling the bottle "barium sulphate."

The mistake was not noticed, and a few teaspoonsful of milk with drops of the drug were administered.

When the Rajah began to vomit the mistake was discovered, and antidotes were tried, but without avail, and death occurred two hours later.

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